

Appendix RF Test Data for 2.4GWIFI

Company : COOPERS CO.,LTD

会社 : COOPERS 株式会社

EUT : tablet PC

Model Number : P10

Report No. : CTA26031200205

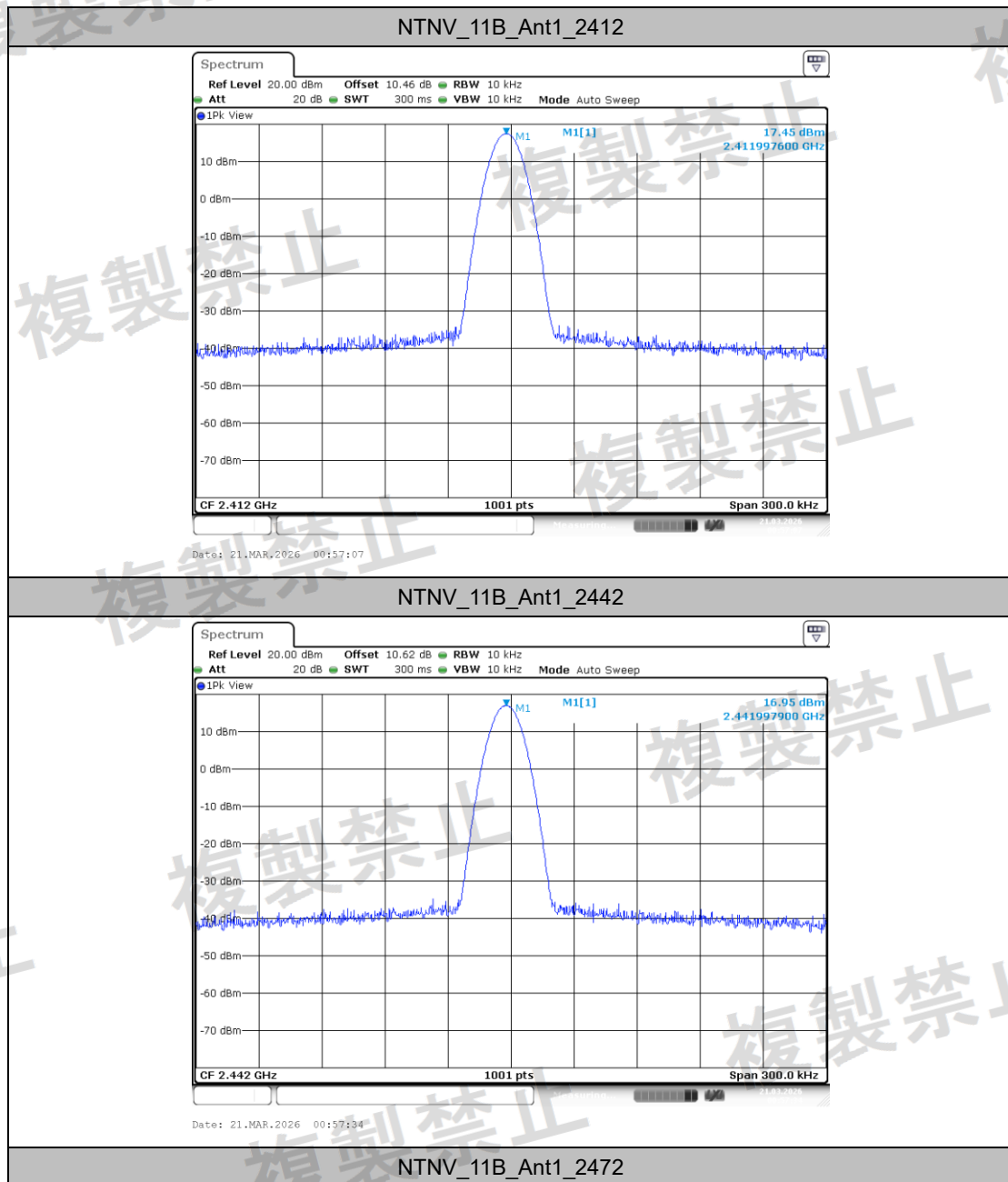
Reviewed By : Eric Wang

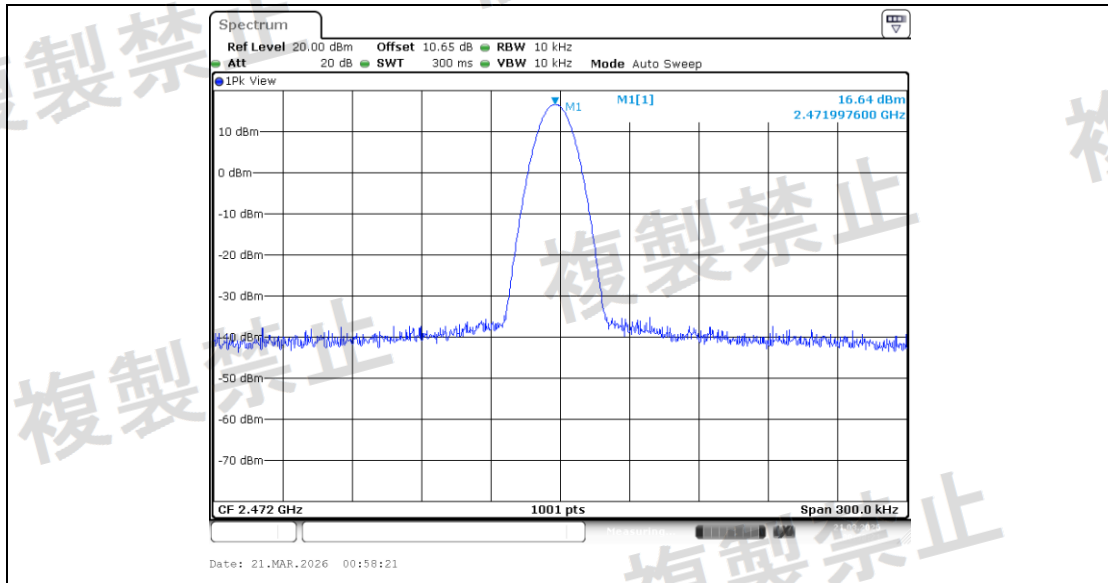
Appendix A: Frequency Error

Test Result

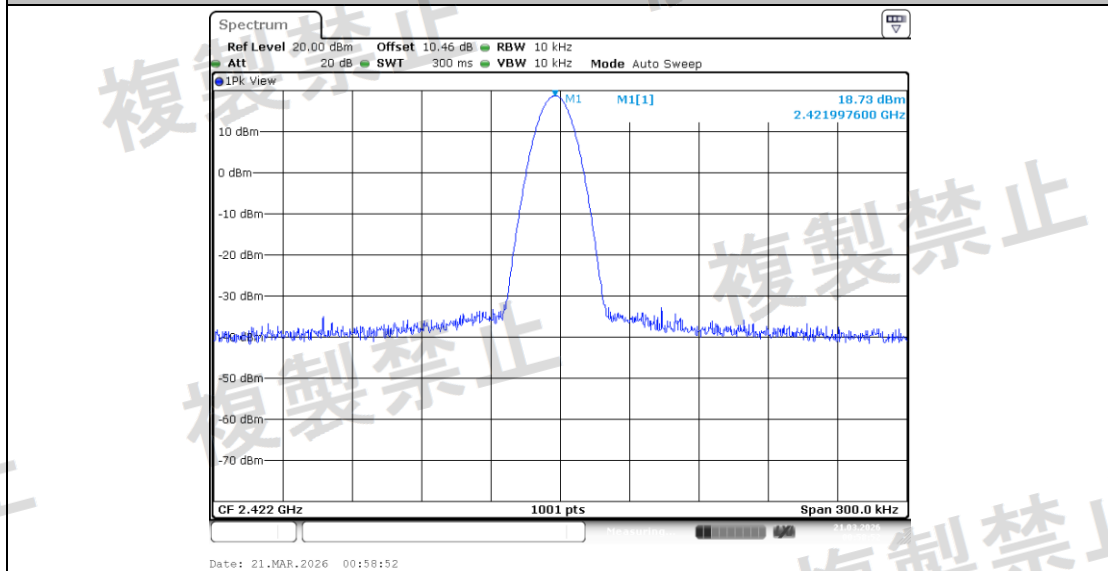
TestCondition	TestMode	Antenna	Freq(MHz)	CenterFrequency [MHz]	Result[ppm]	Limit[ppm]	Verdict
NTNV	11B	Ant1	2412	2411.9976	-0.99503	±50	PASS
			2442	2441.9979	-0.85995	±50	PASS
			2472	2471.9976	-0.97087	±50	PASS
	11N40SISO	Ant1	2422	2421.9976	-0.99092	±50	PASS
			2462	2461.9976	-0.97482	±50	PASS

Test Graphs

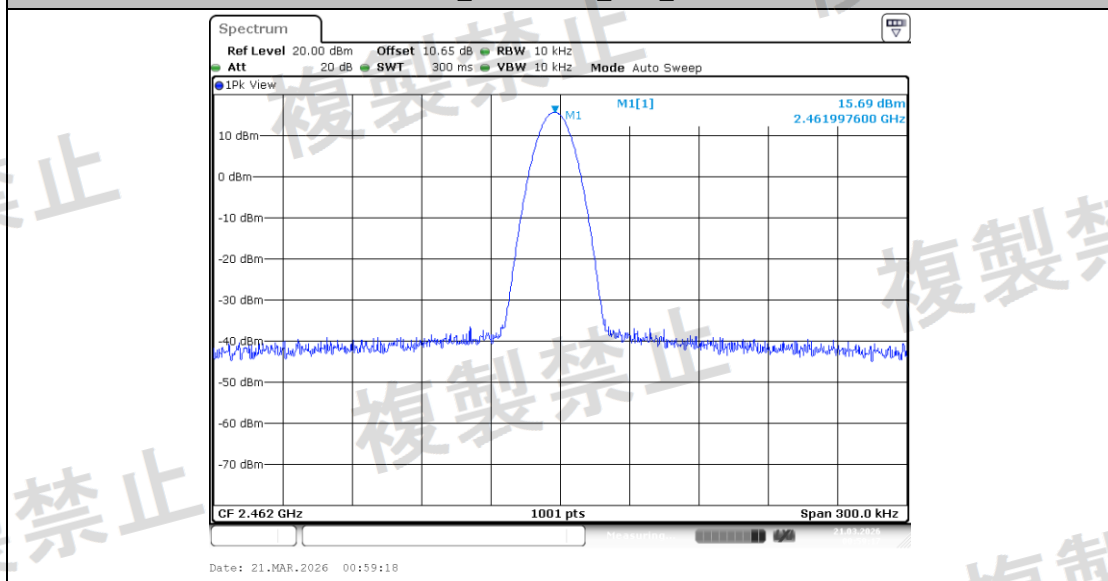




NTNV_11N40SISO_Ant1_2422



NTNV_11N40SISO_Ant1_2462

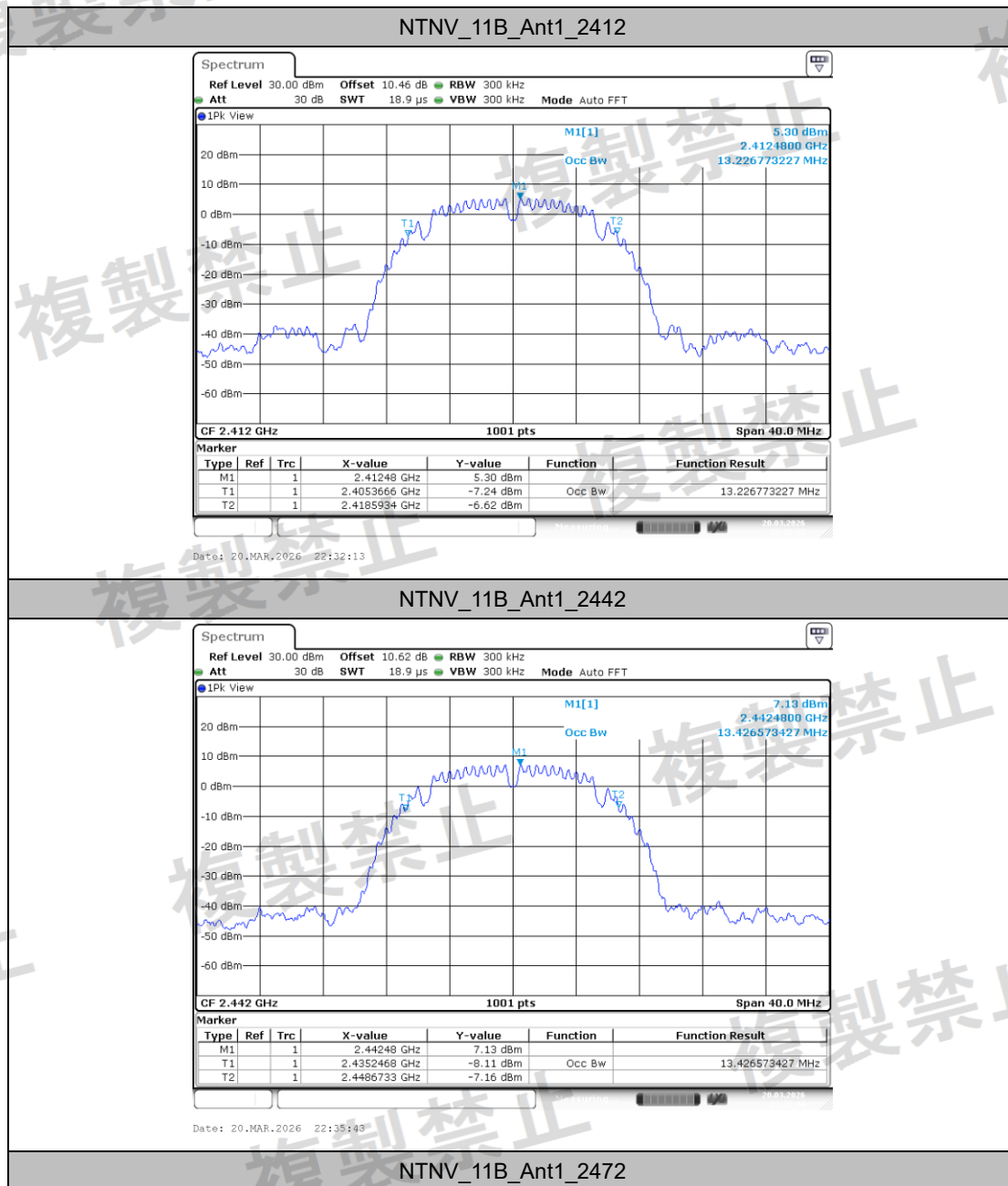


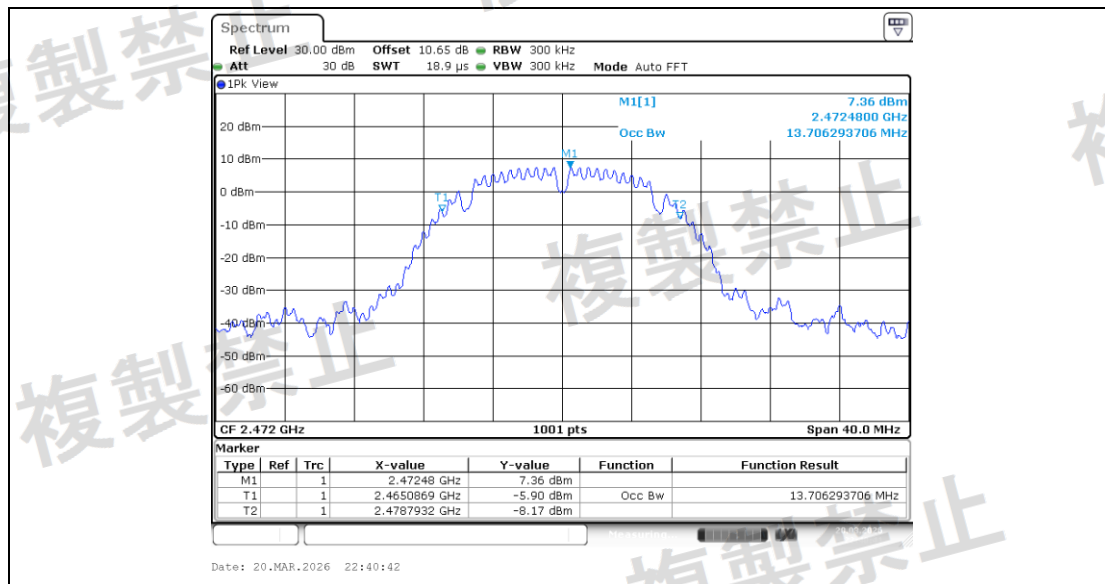
Appendix B: Occupied Bandwidth

Test Result

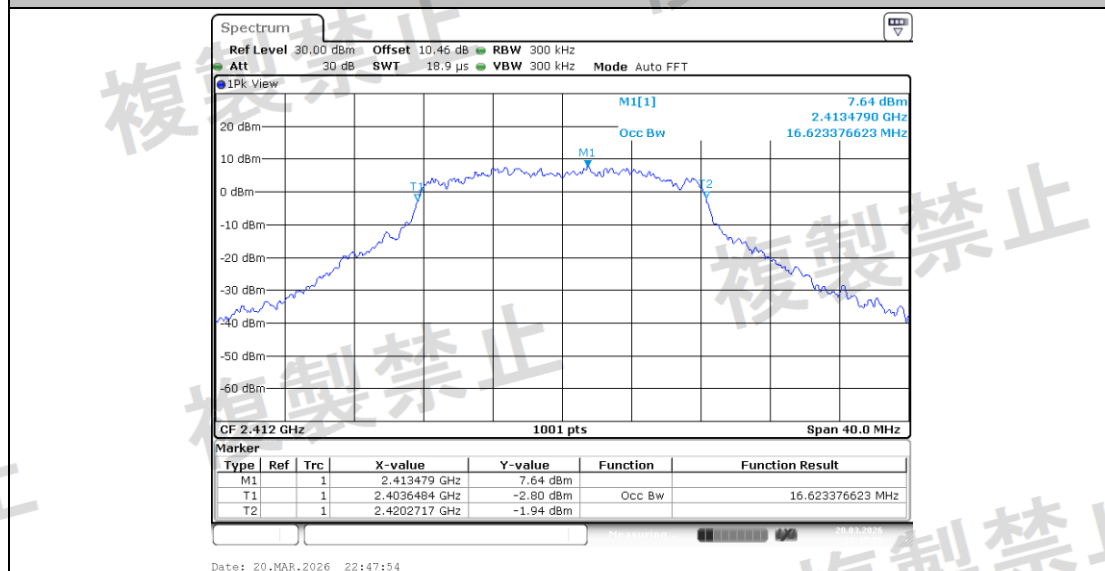
TestCondition	TestMode	Antenna	Freq(MHz)	Result [MHz]	Limit [MHz]	Verdict
NTNV	11B	Ant1	2412	13.227	≤26	PASS
			2442	13.427	≤26	PASS
			2472	13.706	≤26	PASS
	11G	Ant1	2412	16.623	≤26	PASS
			2442	16.783	≤26	PASS
			2472	17.463	≤26	PASS
	11N20SI SO	Ant1	2412	17.702	≤26	PASS
			2442	17.702	≤26	PASS
			2472	17.662	≤26	PASS
	11N40SI SO	Ant1	2422	35.964	26-40	PASS
			2442	35.964	26-40	PASS
			2462	36.124	26-40	PASS

Test Graphs

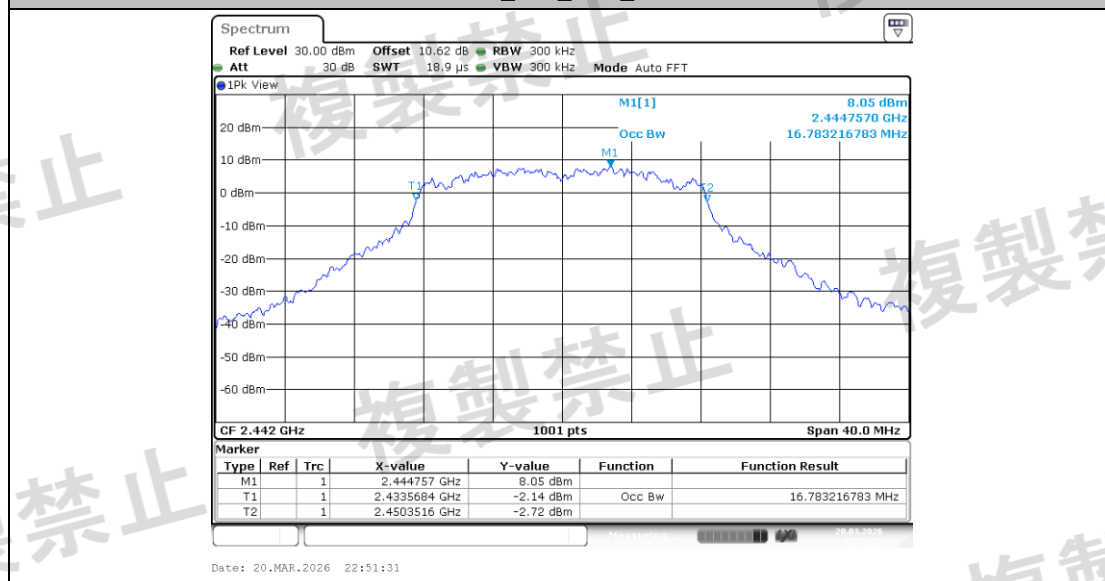


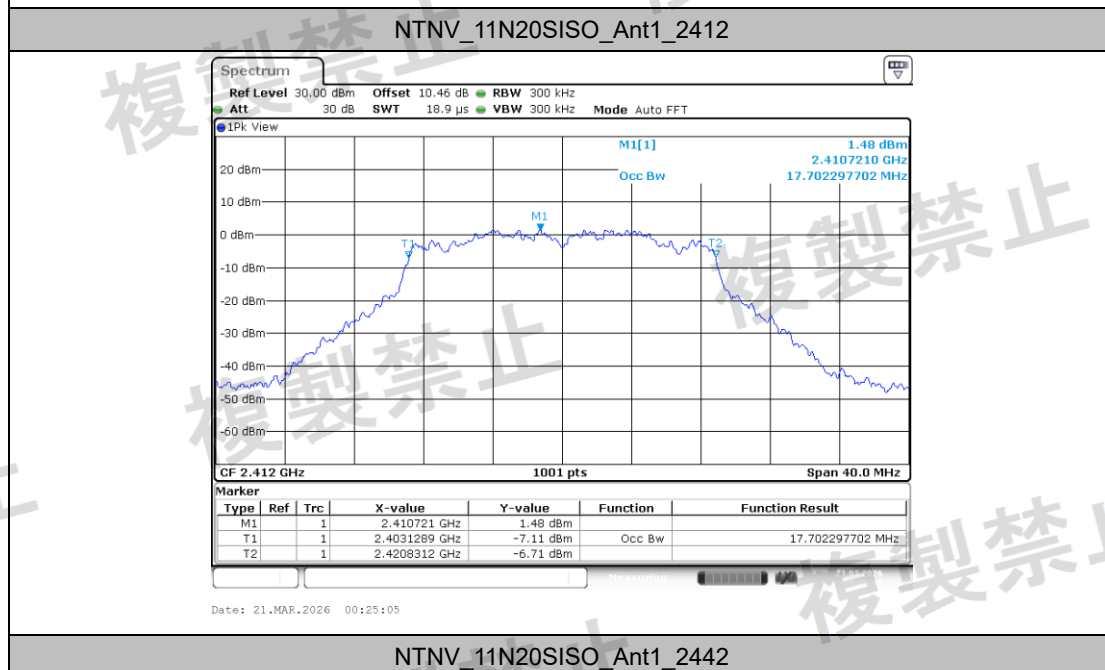
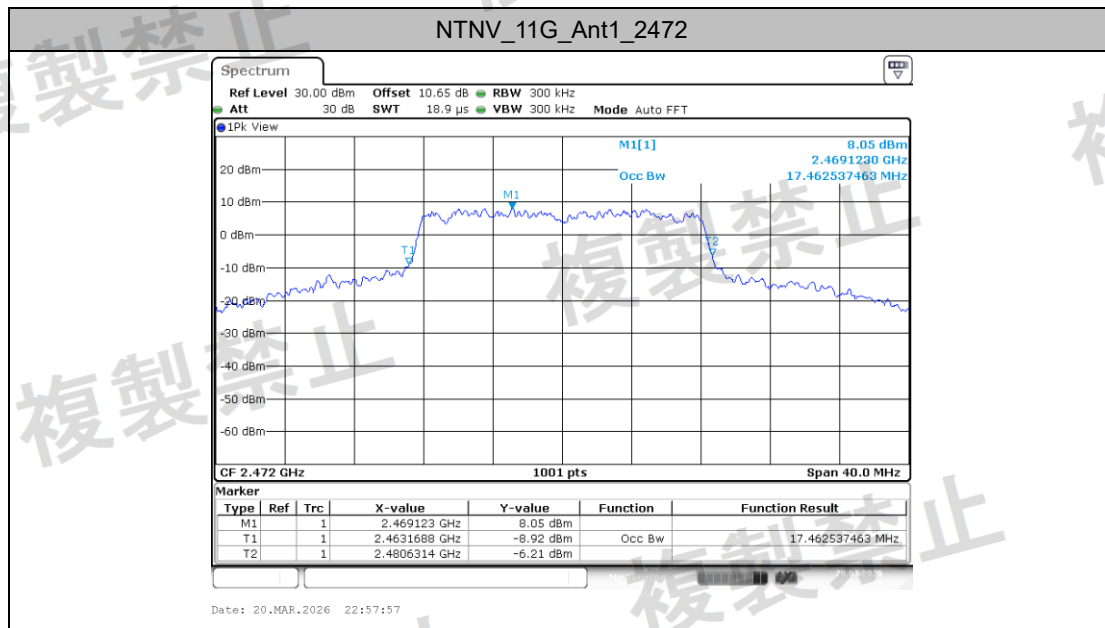


NTNV_11G_Ant1_2412

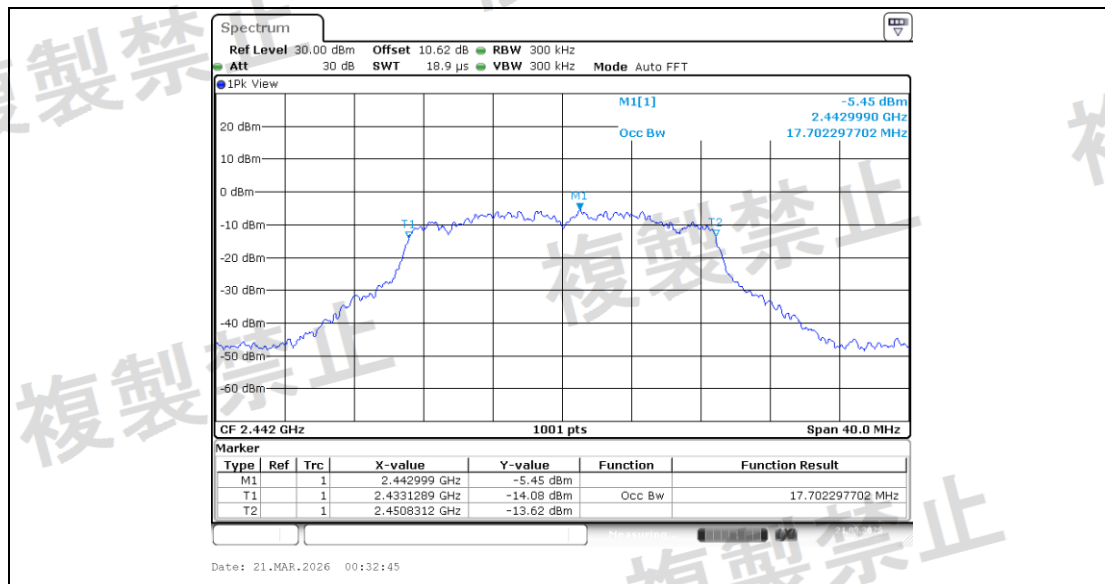


NTNV_11G_Ant1_2442

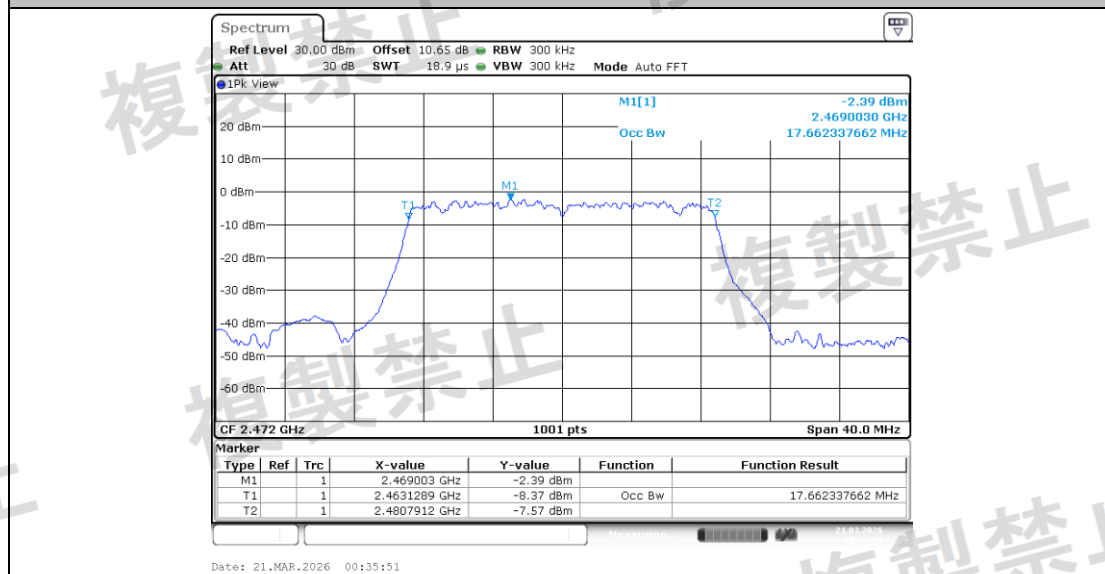




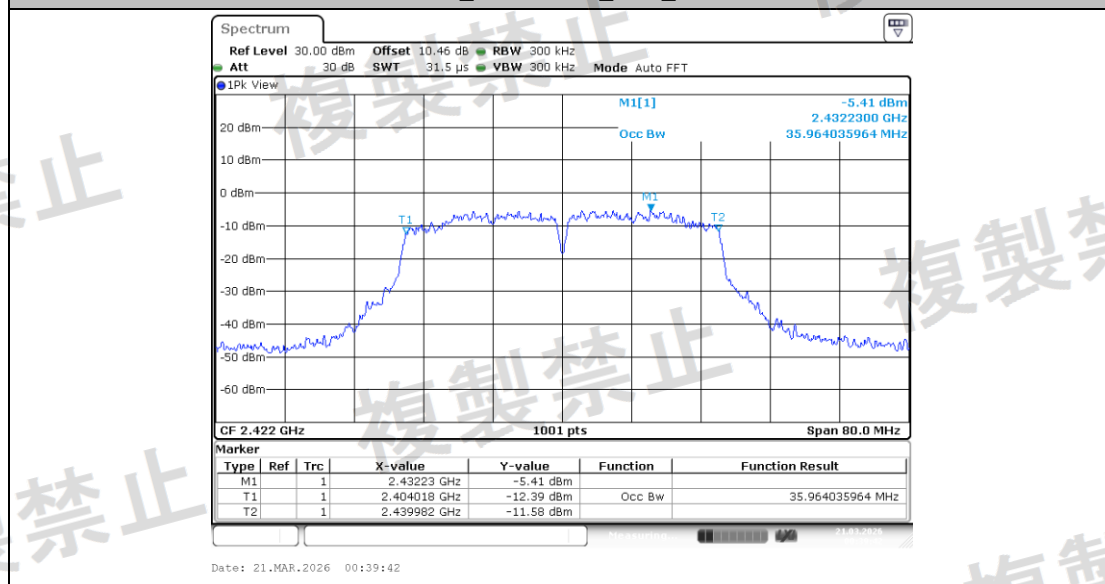
NTNV_11N20SISO_Ant1_2442

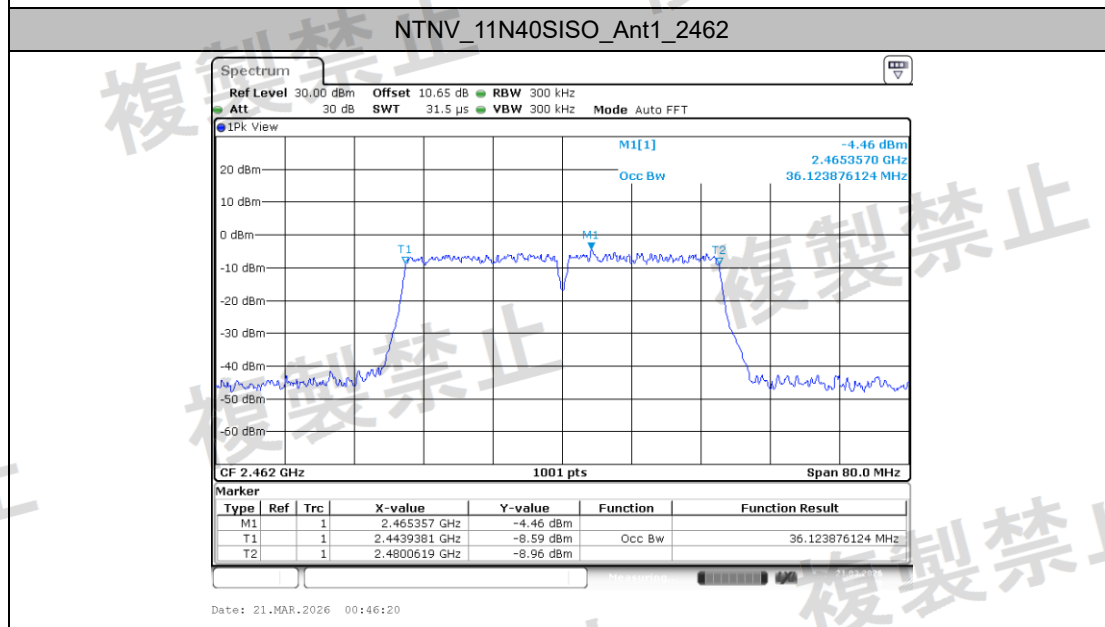
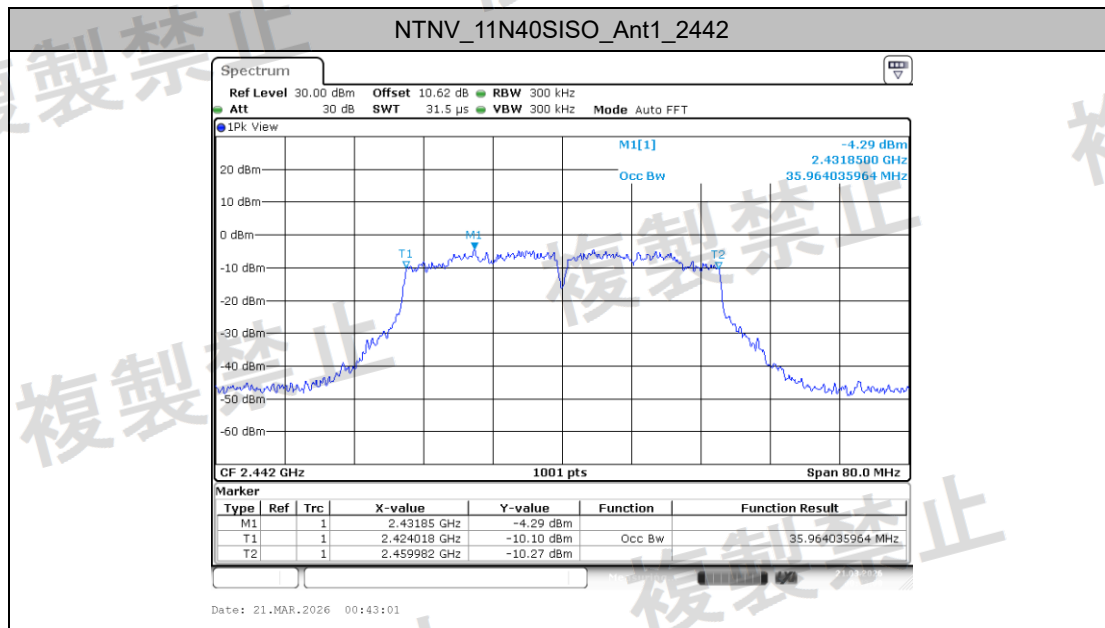


NTNV_11N20SISO_Ant1_2472



NTNV_11N40SISO_Ant1_2422



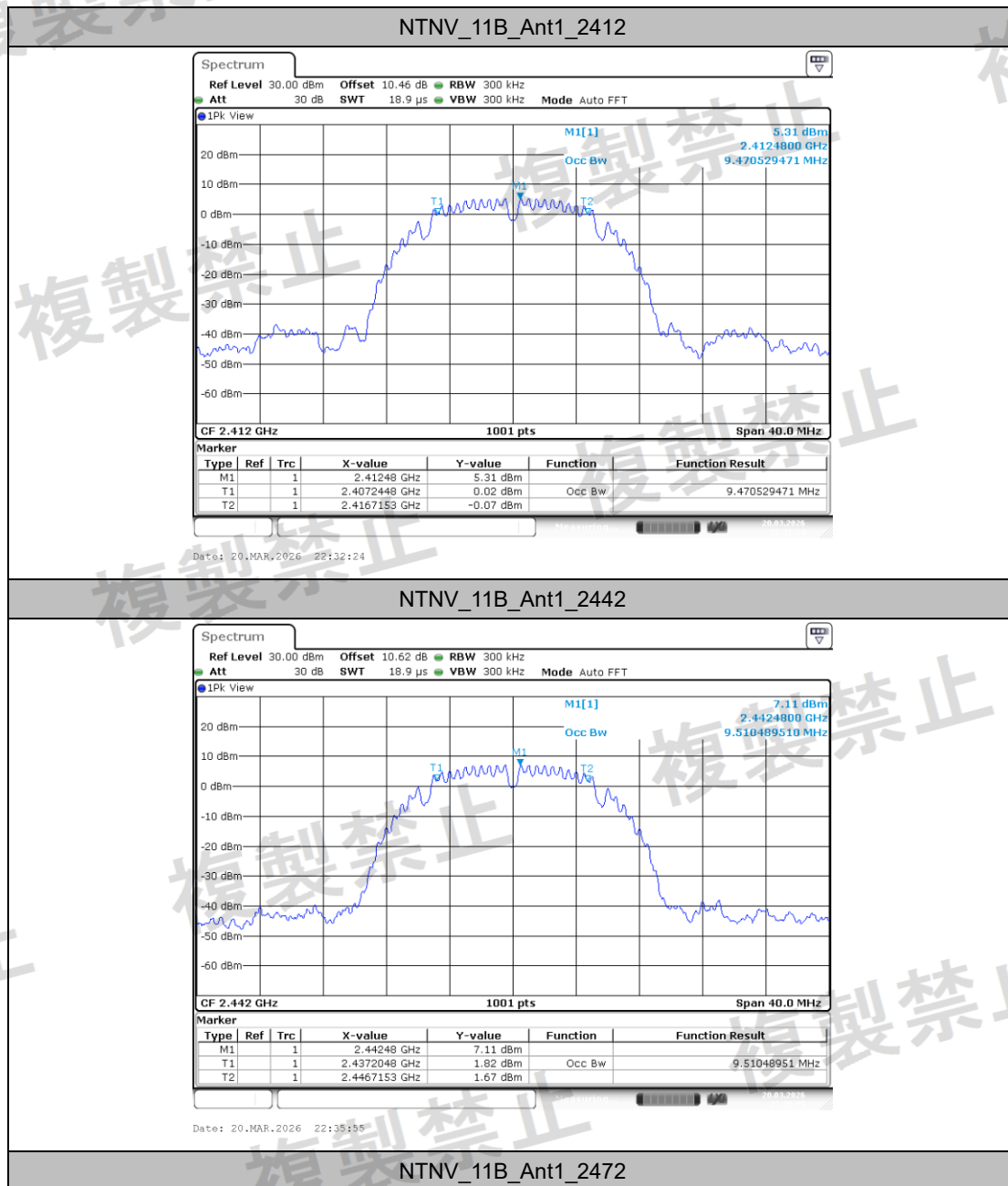


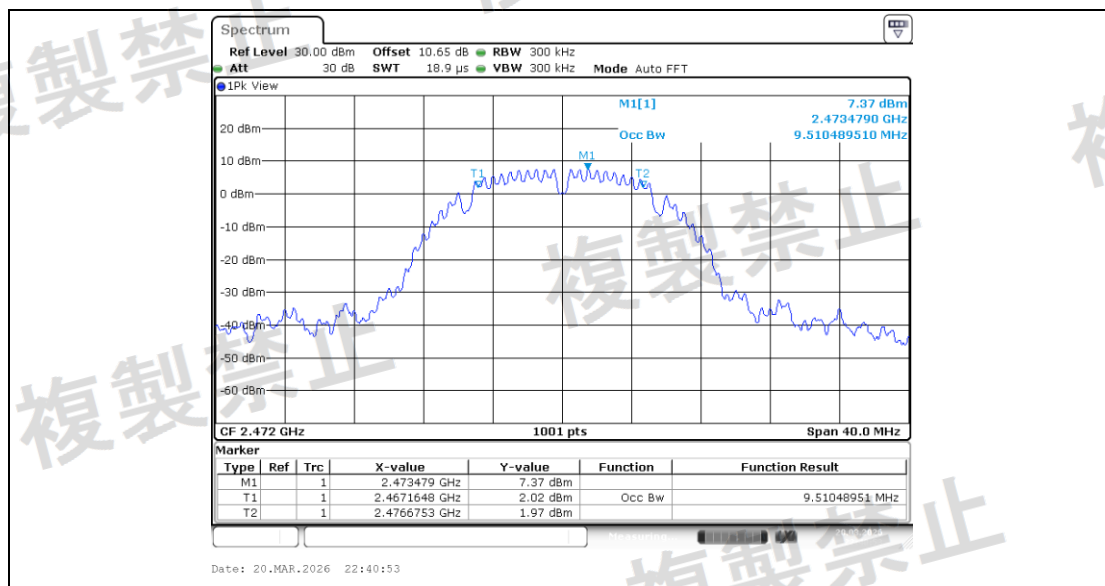
Appendix C: Spread Bandwidth

Test Result

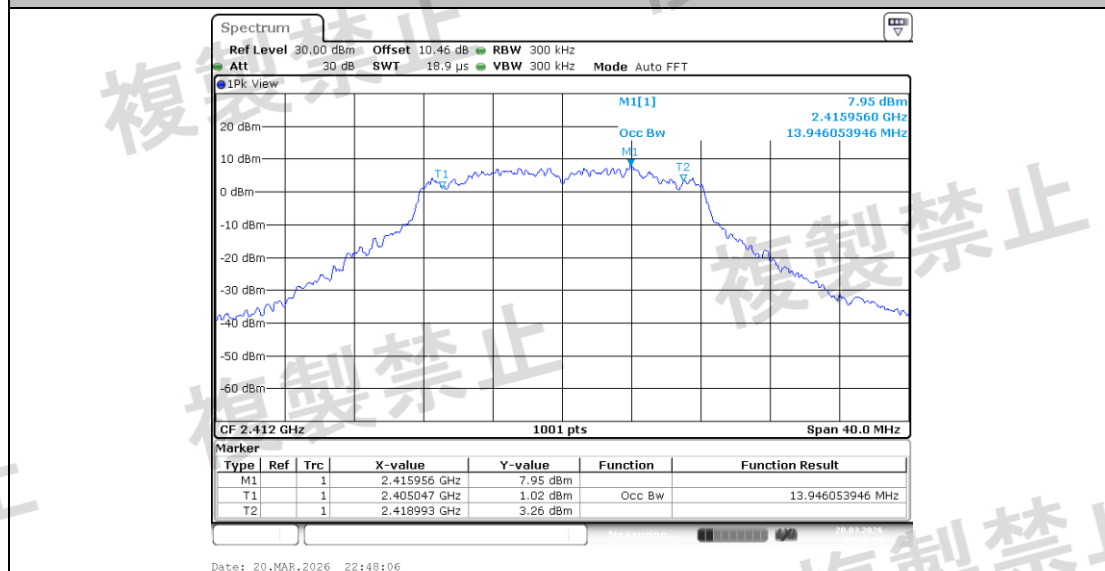
TestCondition	TestMode	Antenna	Freq(MHz)	Result [MHz]	Limit [MHz]	Spread Factor	Limit	Verdict
NTNV	11B	Ant1	2412	9.471	≥0.5	6.888	>5	PASS
			2442	9.510	≥0.5	6.916	>5	PASS
			2472	9.510	≥0.5	6.916	>5	PASS
	11G	Ant1	2412	13.946	≥0.5	---	---	PASS
			2442	13.986	≥0.5	---	---	PASS
			2472	14.905	≥0.5	---	---	PASS
	11N20SI SO	Ant1	2412	14.985	≥0.5	---	---	PASS
			2442	15.465	≥0.5	---	---	PASS
			2472	15.744	≥0.5	---	---	PASS
	11N40SI SO	Ant1	2422	30.210	≥0.5	---	---	PASS
			2442	32.607	≥0.5	---	---	PASS
			2462	32.687	≥0.5	---	---	PASS

Test Graphs

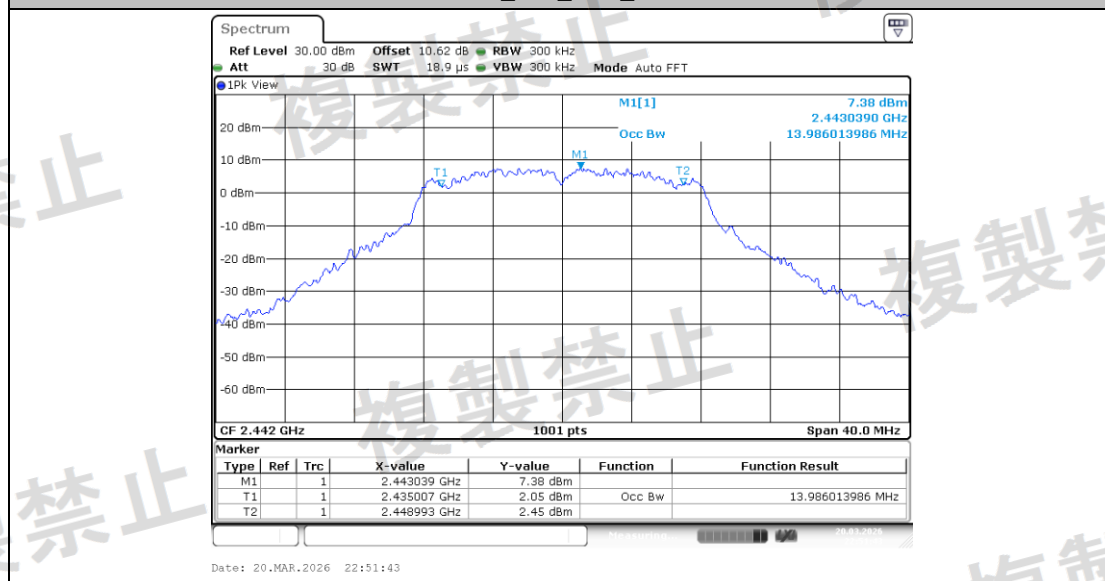


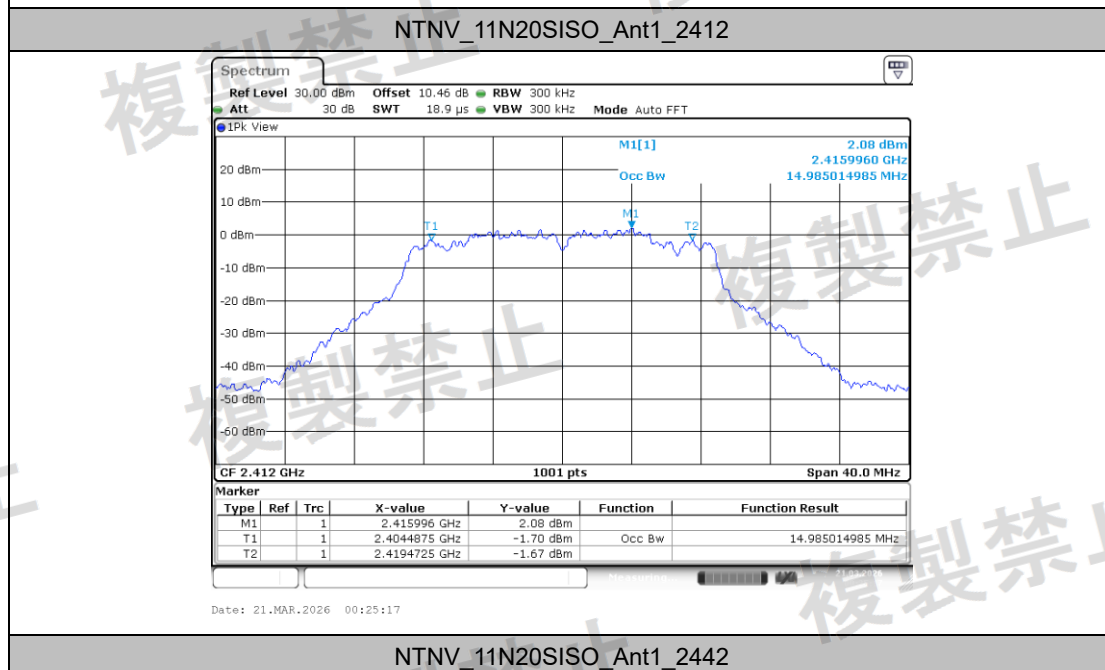
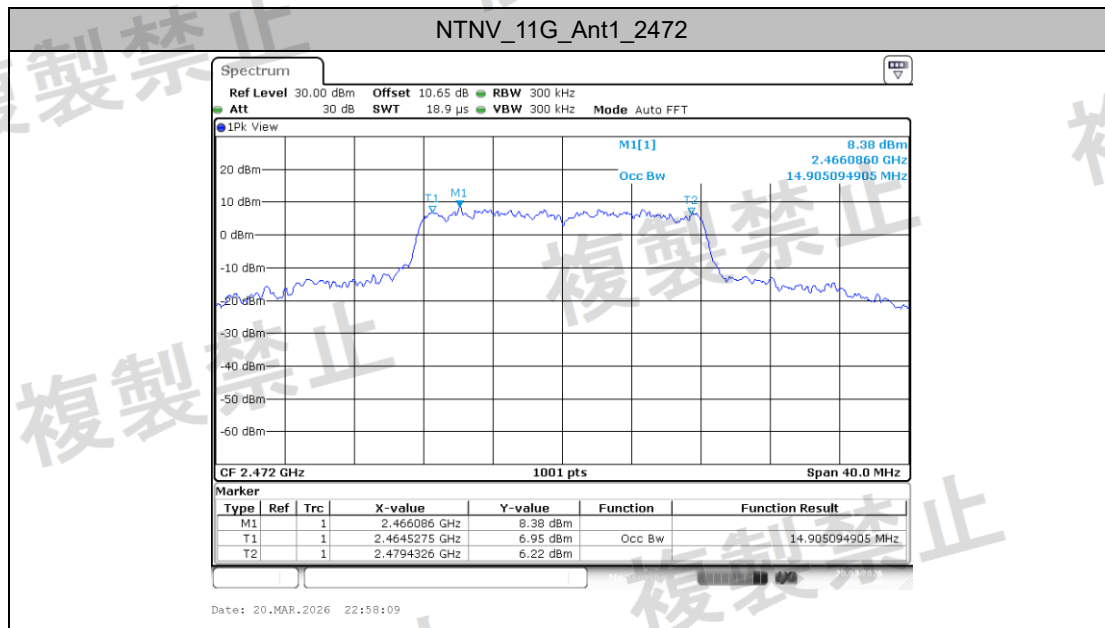


NTNV_11G_Ant1_2412

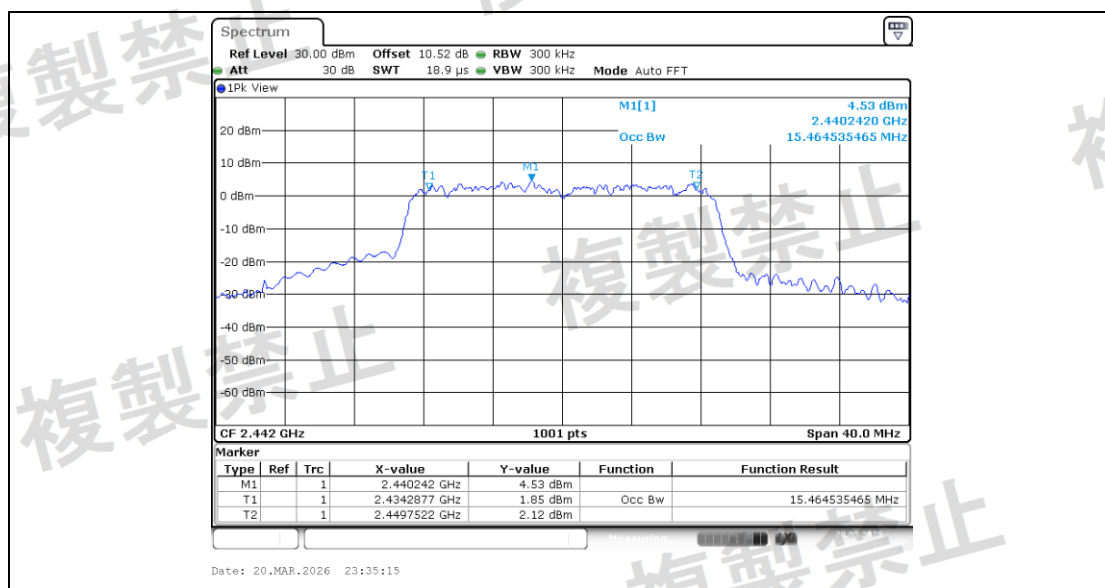


NTNV_11G_Ant1_2442

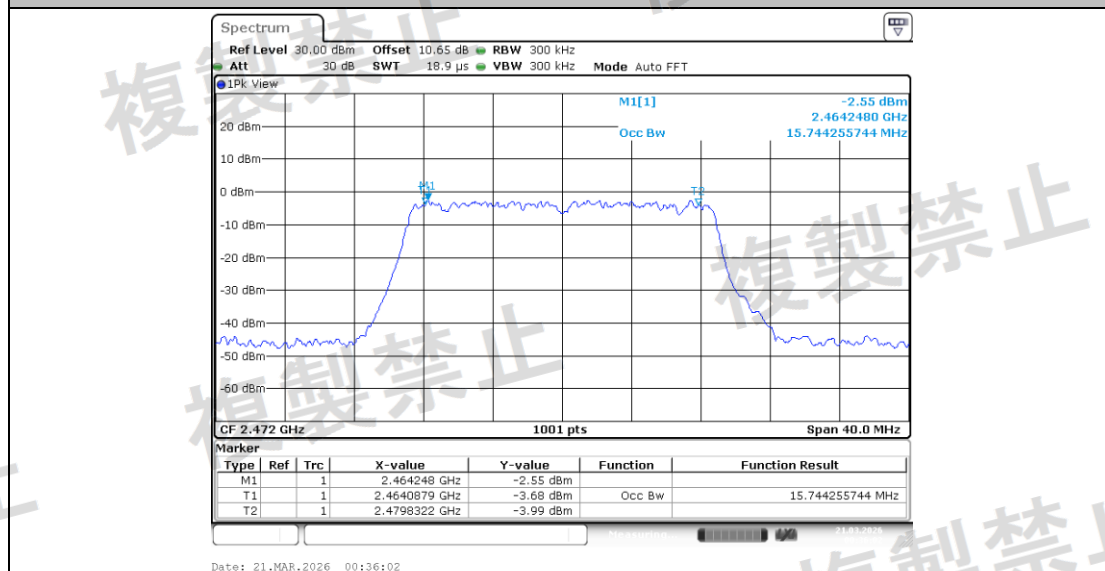




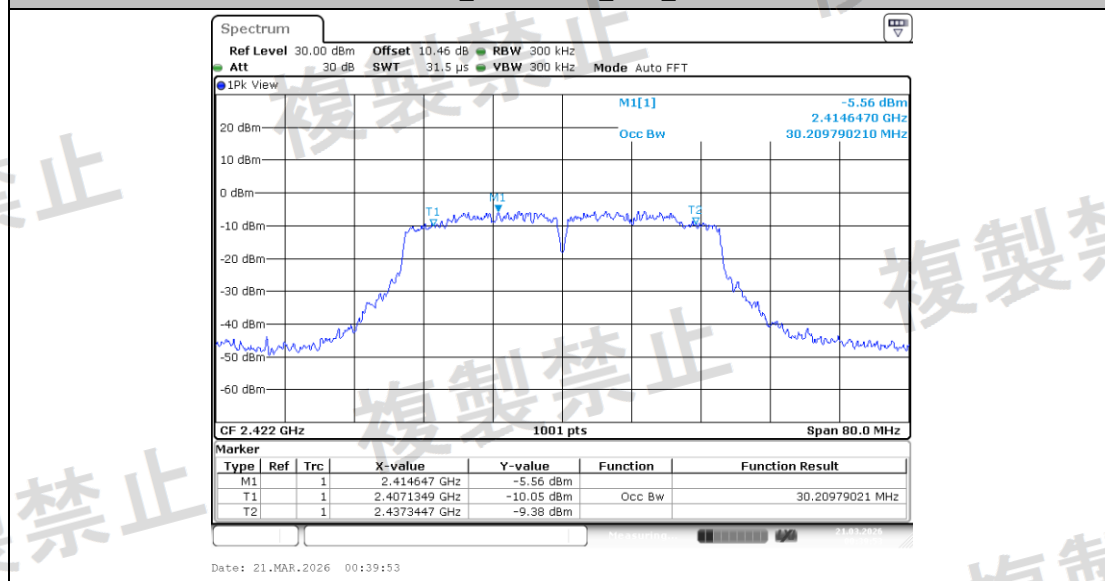
NTNV_11N20SISO_Ant1_2442

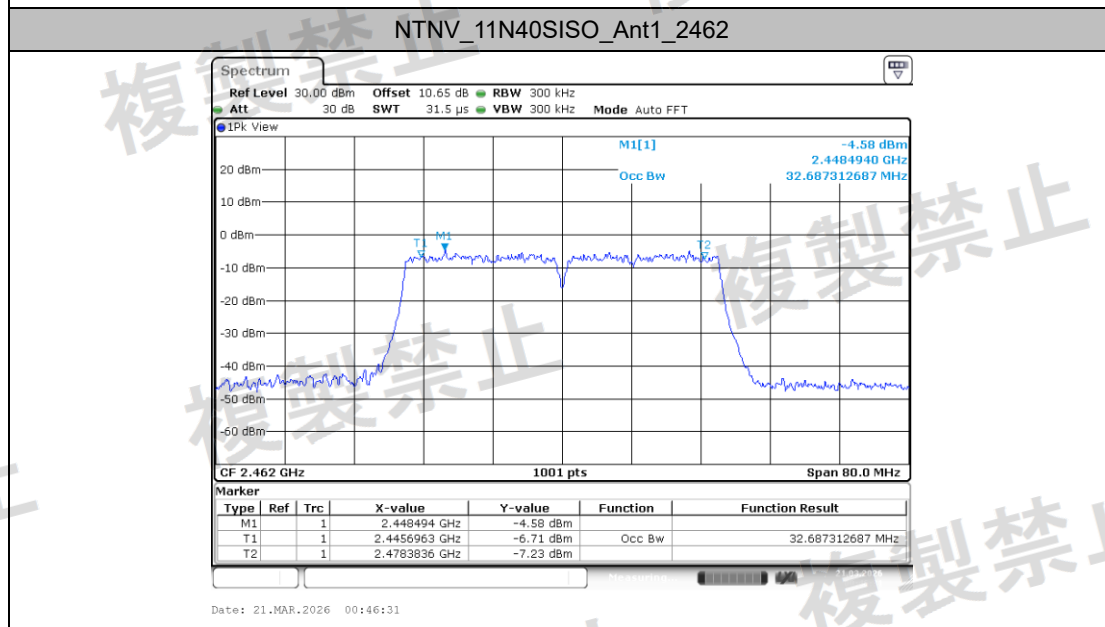
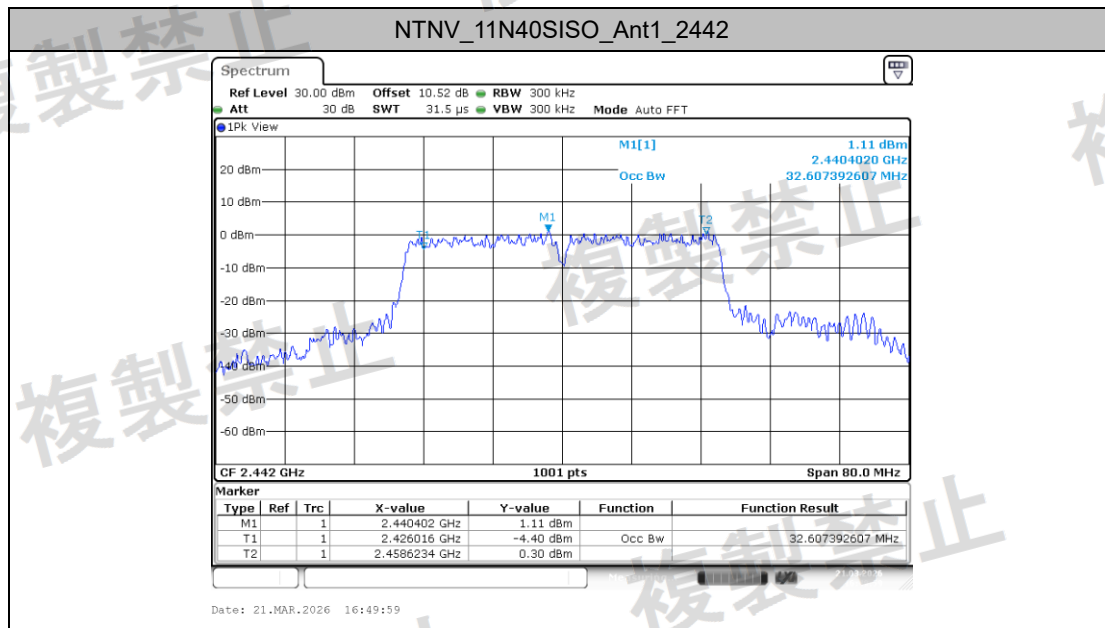


NTNV_11N20SISO_Ant1_2472



NTNV_11N40SISO_Ant1_2422





Appendix D: Spurious Emission of TX

Test Result

TestCondition	TestMode	Antenna	Channel (MHz)	Freq.Range [MHz]	Freq (MHz)	Result [dBm]	Limit [dBm]	Result [μW]	Limit [μW]	Verdict
NTNV	11B	Ant1	2412	30~1000	239.52	-53.08	≤-26	0.00492	≤2.5	PASS
				1000~2387	2386.3 1	-43.51	≤-26	0.04457	≤2.5	PASS
				2387~2400	2396.9 6	-32.68	≤-16	0.53951	≤25	PASS
				2483.5~2496.5	2495.4 2	-43.12	≤-16	0.04875	≤25	PASS
				2496.5~13000	4824.0 8	-47.05	≤-26	0.01972	≤2.5	PASS
			2442	30~1000	836.07	-53.10	≤-26	0.00490	≤2.5	PASS
				1000~2387	2387.0 0	-51.27	≤-26	0.00746	≤2.5	PASS
				2387~2400	2394.5 5	-41.78	≤-16	0.06637	≤25	PASS
				2483.5~2496.5	2485.5 2	-41.77	≤-16	0.06653	≤25	PASS
				2496.5~13000	4883.9 5	-45.69	≤-26	0.02698	≤2.5	PASS
			2472	30~1000	938.41	-53.11	≤-26	0.00489	≤2.5	PASS
				1000~2387	2186.2 3	-53.33	≤-26	0.00465	≤2.5	PASS
				2387~2400	2392.8 8	-43.79	≤-16	0.04178	≤25	PASS
				2483.5~2496.5	2484.2 0	-28.81	≤-16	1.31522	≤25	PASS
				2496.5~13000	2498.0 8	-41.95	≤-26	0.06383	≤2.5	PASS
	11G	Ant1	2412	30~1000	872.93	-52.91	≤-26	0.00512	≤2.5	PASS
				1000~2387	2387.0 0	-52.12	≤-26	0.00614	≤2.5	PASS
				2387~2400	2400.0 0	-20.38	≤-16	9.16220	≤25	PASS
				2483.5~2496.5	2488.5 1	-43.77	≤-16	0.04198	≤25	PASS
				2496.5~13000	6852.3 0	-49.11	≤-26	0.01227	≤2.5	PASS
			2442	30~1000	241.70	-52.57	≤-26	0.00553	≤2.5	PASS
				1000~2387	2382.1	-50.20	≤-26	0.00955	≤2.5	PASS

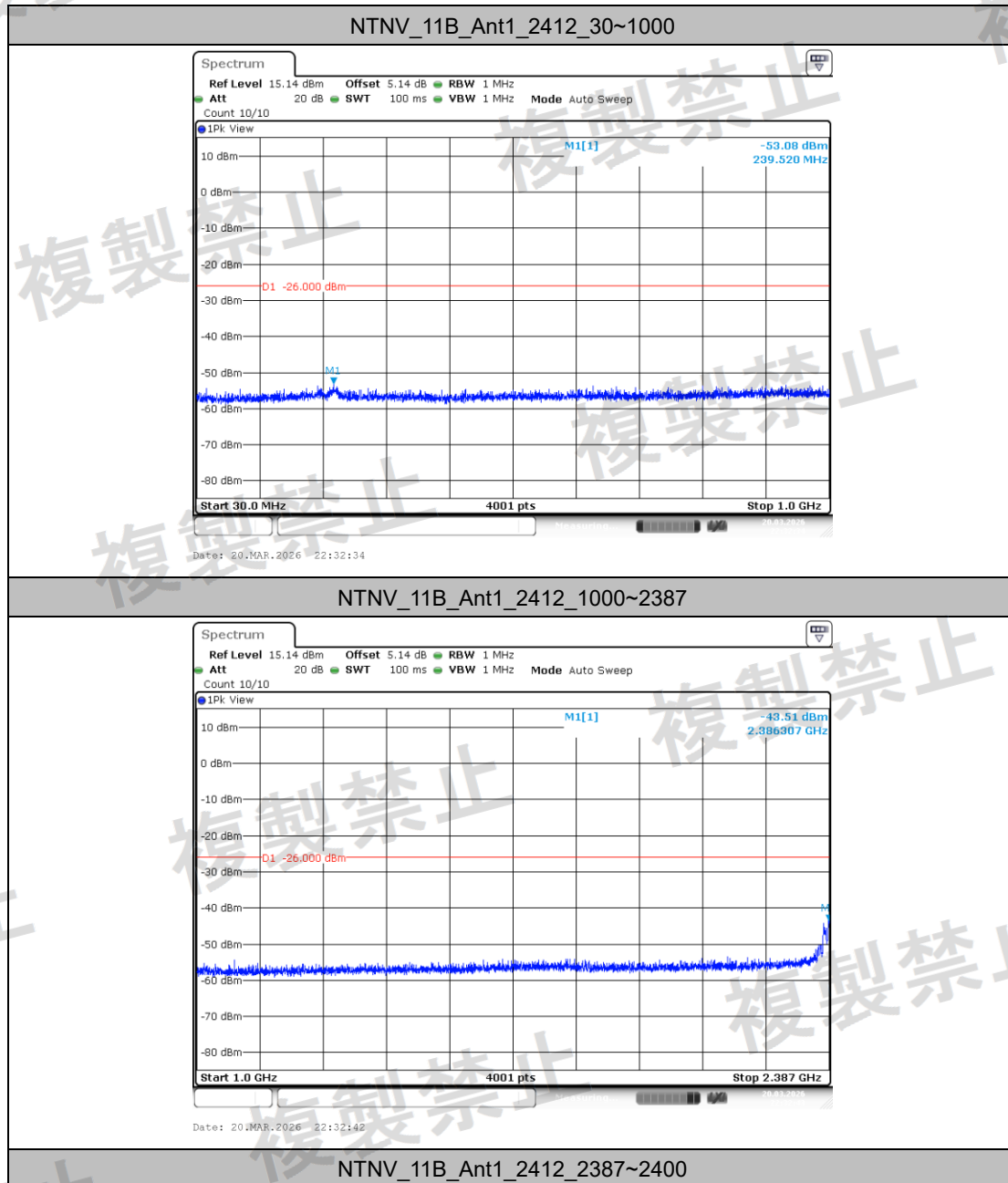
					5					
				2387~2400	2398.2 5	-40.50	≤-16	0.08913	≤25	PASS
				2483.5~2496.5	2484.0 9	-41.18	≤-16	0.07621	≤25	PASS
				2496.5~13000	4883.4 2	-48.29	≤-26	0.01483	≤2.5	PASS
			2472	30~1000	933.07	-53.56	≤-26	0.00441	≤2.5	PASS
				1000~2387	2113.7 6	-53.35	≤-26	0.00462	≤2.5	PASS
				2387~2400	2389.9 0	-43.20	≤-16	0.04786	≤25	PASS
				2483.5~2496.5	2483.5 1	-26.89	≤-16	2.04644	≤25	PASS
				2496.5~13000	6983.0 7	-48.54	≤-26	0.01400	≤2.5	PASS
	11N20Si SO	Ant1	2412	30~1000	237.10	-52.90	≤-26	0.00513	≤2.5	PASS
				1000~2387	2385.6 1	-48.62	≤-26	0.01374	≤2.5	PASS
				2387~2400	2399.9 9	-13.98	≤-16	39.9944 7	≤25	See table below
				2483.5~2496.5	2494.3 7	-43.42	≤-16	0.04550	≤25	PASS
				2496.5~13000	6982.0 2	-48.01	≤-26	0.01581	≤2.5	PASS
			2442	30~1000	910.03	-53.40	≤-26	0.00457	≤2.5	PASS
				1000~2387	2302.3 9	-52.96	≤-26	0.00506	≤2.5	PASS
				2387~2400	2392.1 4	-43.23	≤-16	0.04753	≤25	PASS
				2483.5~2496.5	2493.7 5	-43.43	≤-16	0.04539	≤25	PASS
				2496.5~13000	6973.0 9	-48.94	≤-26	0.01276	≤2.5	PASS
			2472	30~1000	962.17	-53.07	≤-26	0.00493	≤2.5	PASS
				1000~2387	2375.5 6	-52.88	≤-26	0.00515	≤2.5	PASS
				2387~2400	2387.1 2	-43.70	≤-16	0.04266	≤25	PASS
				2483.5~2496.5	2483.5 1	-25.93	≤-16	2.55270	≤25	PASS
				2496.5~13000	2500.1	-47.84	≤-26	0.01644	≤2.5	PASS

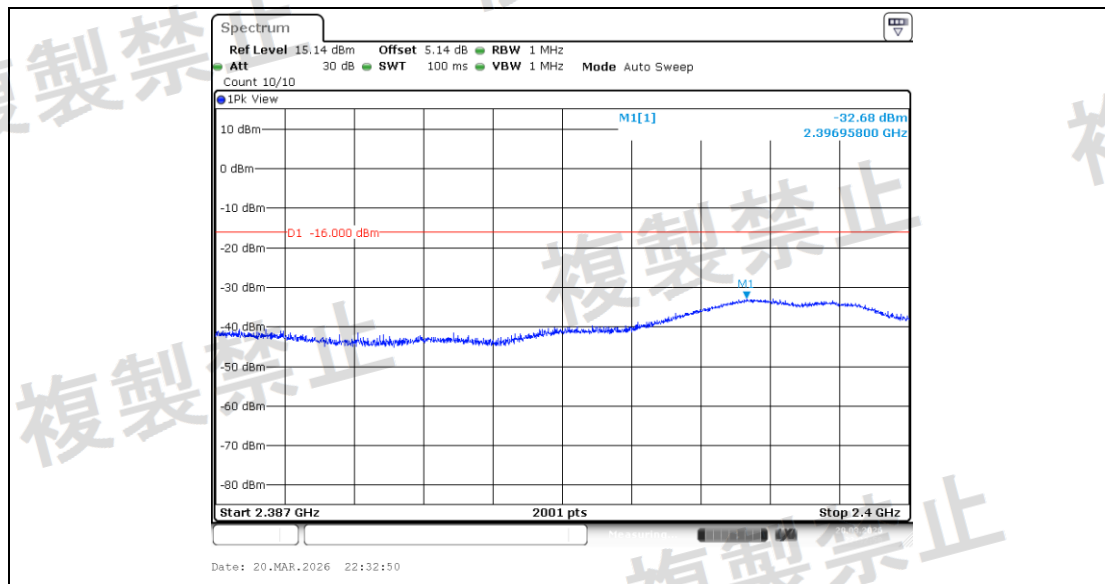
	11N40SI SO	Ant1	2422		8					
				30~1000	955.38	-52.20	≤-26	0.00603	≤2.5	PASS
				1000~2387	2386.3 1	-46.02	≤-26	0.02500	≤2.5	PASS
				2387~2400	2399.9 5	-24.21	≤-16	3.79315	≤25	PASS
				2483.5~2496.5	2484.8 8	-43.36	≤-16	0.04613	≤25	PASS
			2442	2496.5~13000	6909.5 5	-48.17	≤-26	0.01524	≤2.5	PASS
				30~1000	921.67	-53.43	≤-26	0.00454	≤2.5	PASS
				1000~2387	2387.0 0	-50.71	≤-26	0.00849	≤2.5	PASS
				2387~2400	2399.4 9	-42.27	≤-16	0.05929	≤25	PASS
				2483.5~2496.5	2489.7 0	-41.97	≤-16	0.06353	≤25	PASS
				2496.5~13000	6842.8 5	-48.42	≤-26	0.01439	≤2.5	PASS
			2462	30~1000	232.73	-52.70	≤-26	0.00537	≤2.5	PASS
				1000~2387	2385.2 7	-49.17	≤-26	0.01211	≤2.5	PASS
				2387~2400	2397.8 1	-41.53	≤-16	0.07031	≤25	PASS
				2483.5~2496.5	2483.5 4	-29.70	≤-16	1.07152	≤25	PASS
				2496.5~13000	2497.0 3	-41.16	≤-26	0.07656	≤2.5	PASS

Test Result_Step2

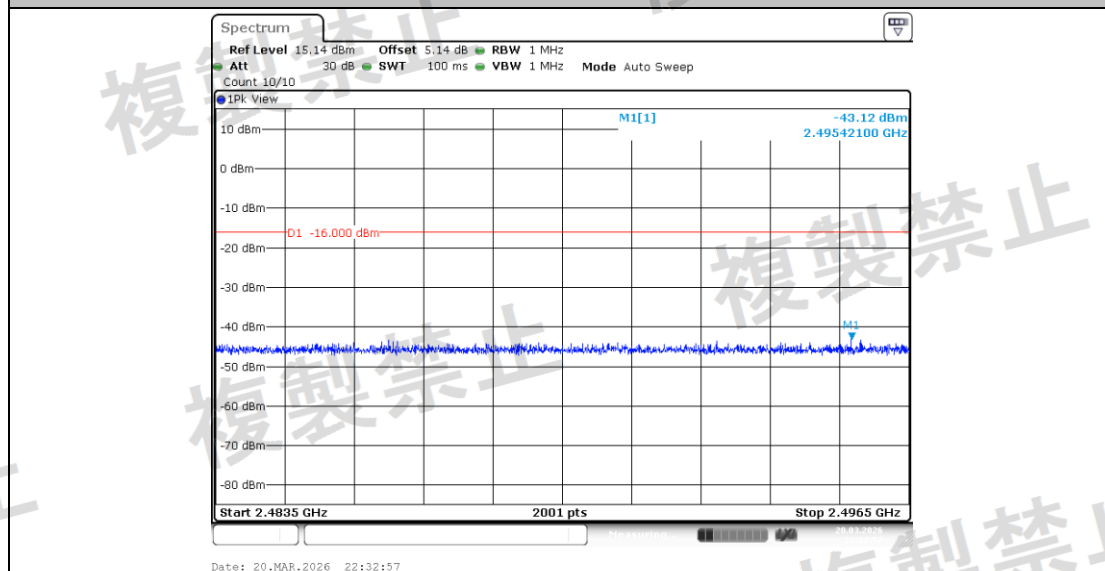
TestCondition	TestMode	PreScan In Ant	Channel	Ant	Freq. [MHz]	Result [dBm]	Limit [dBm]	Result [μW]	Limit [μW]	Verdict
NTNV	11N20SI SO	Ant1	2412	Ant1	2399.97	-34.98	≤-16	0.31769	≤25	PASS

Test Graphs

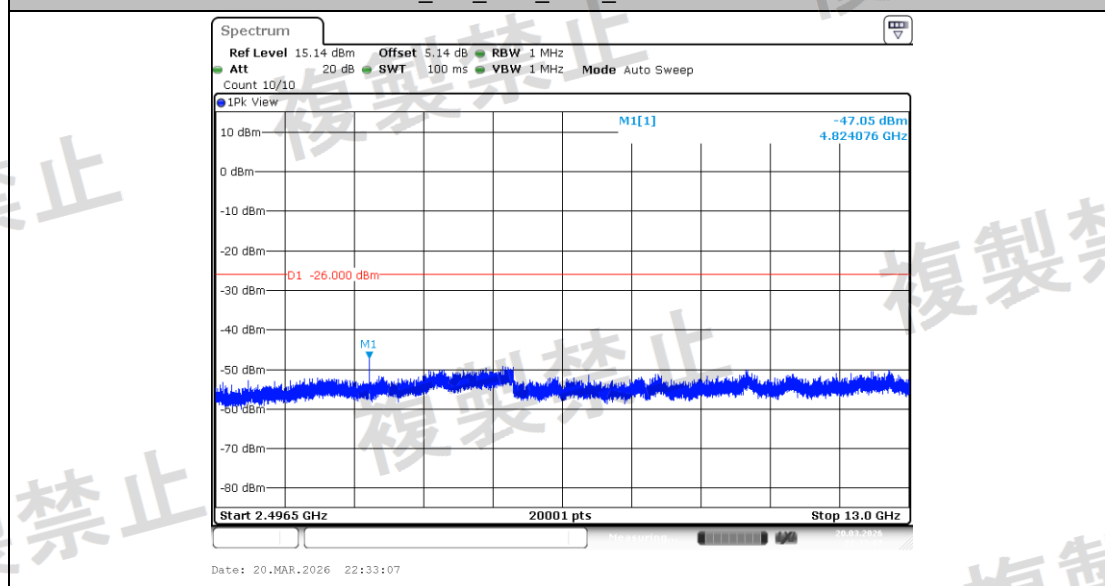


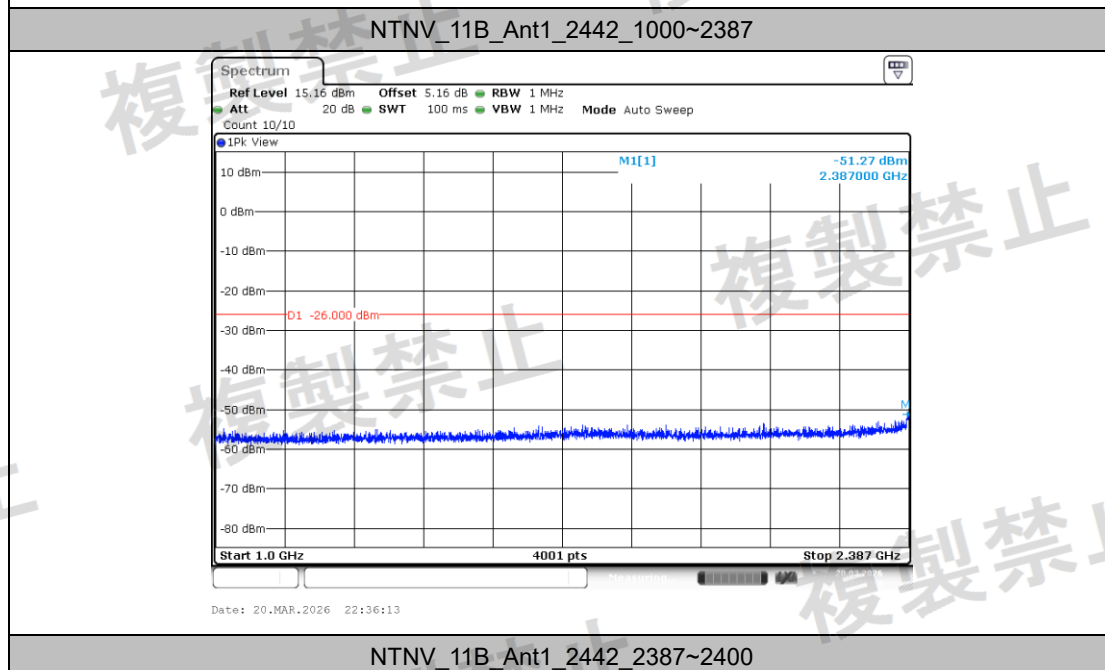
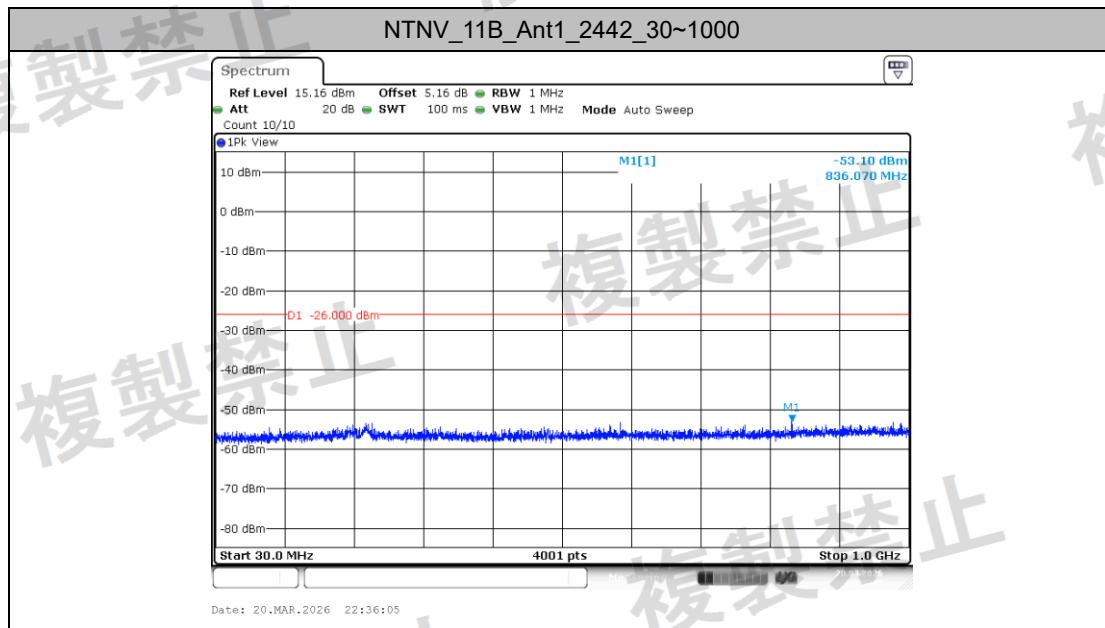


NTNV_11B_Ant1_2412_2483.5~2496.5

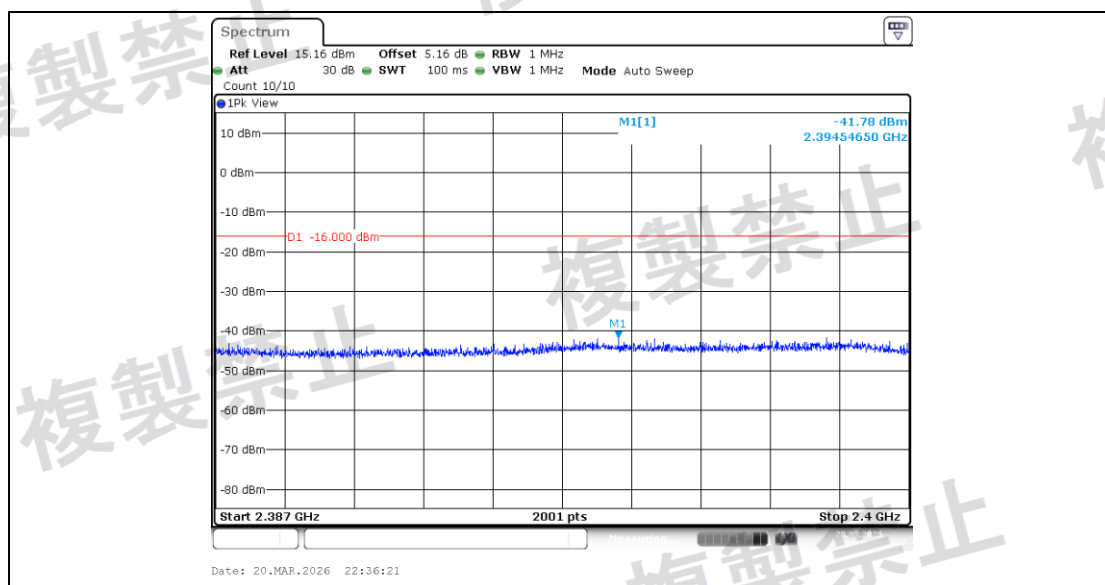


NTNV_11B_Ant1_2412_2496.5~13000

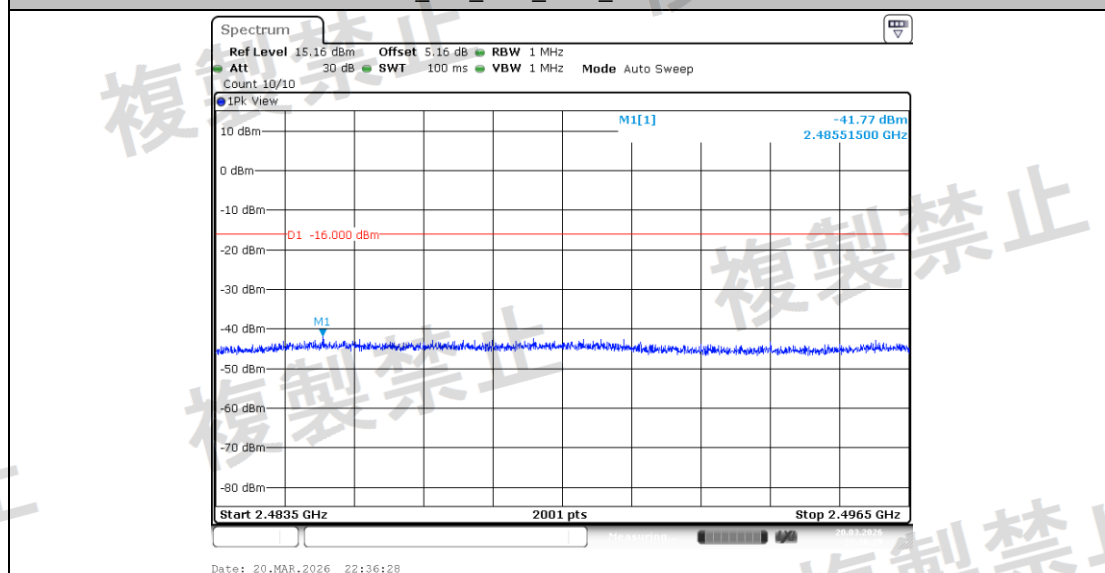




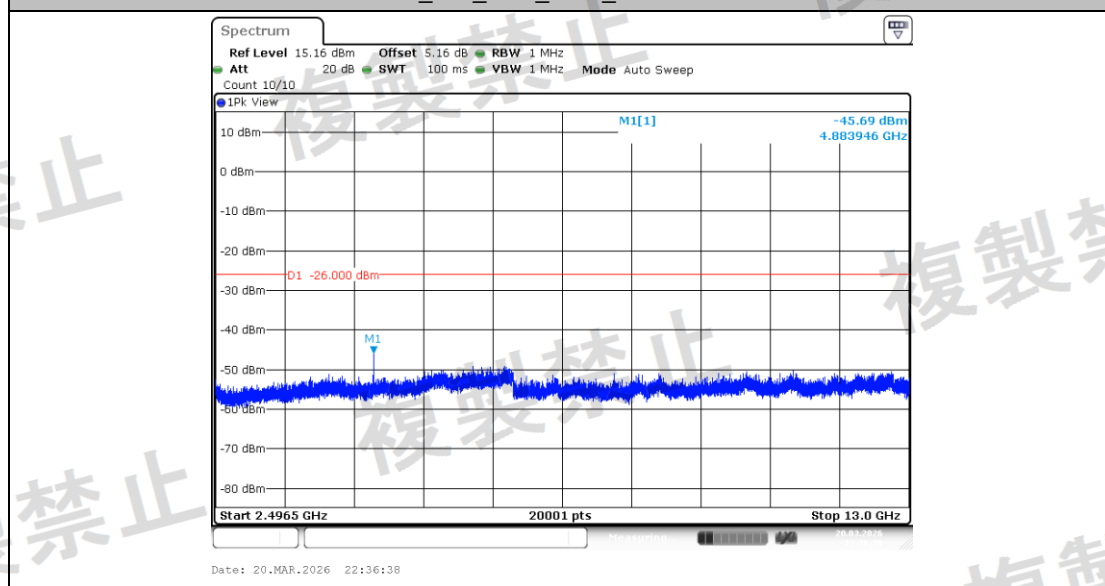
NTNV_11B_Ant1_2442_2387~2400

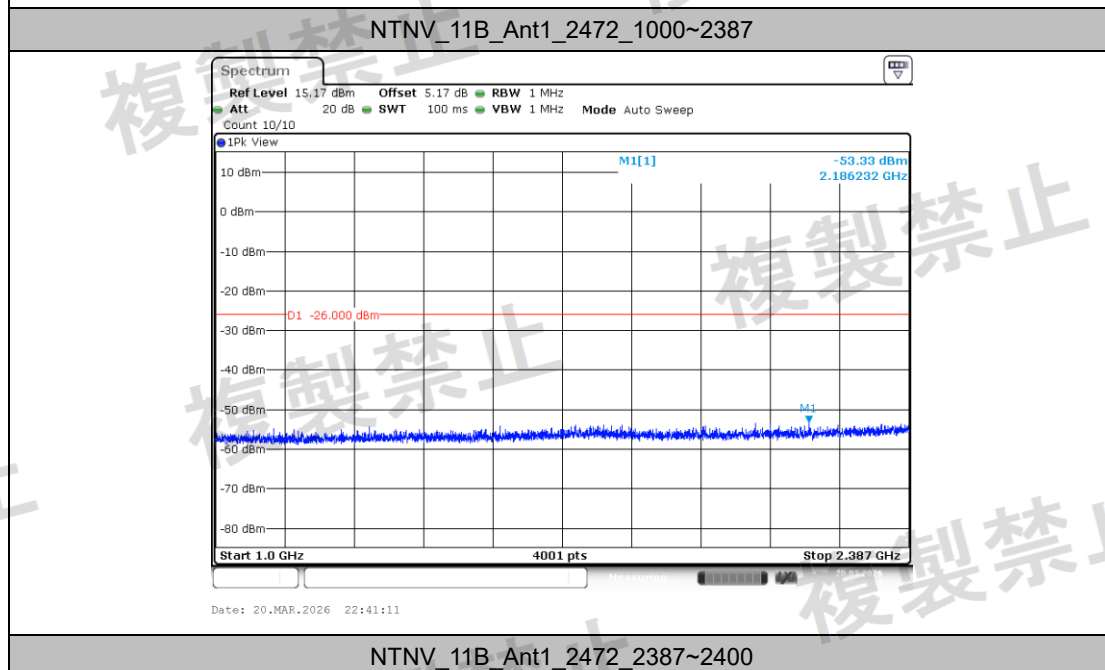
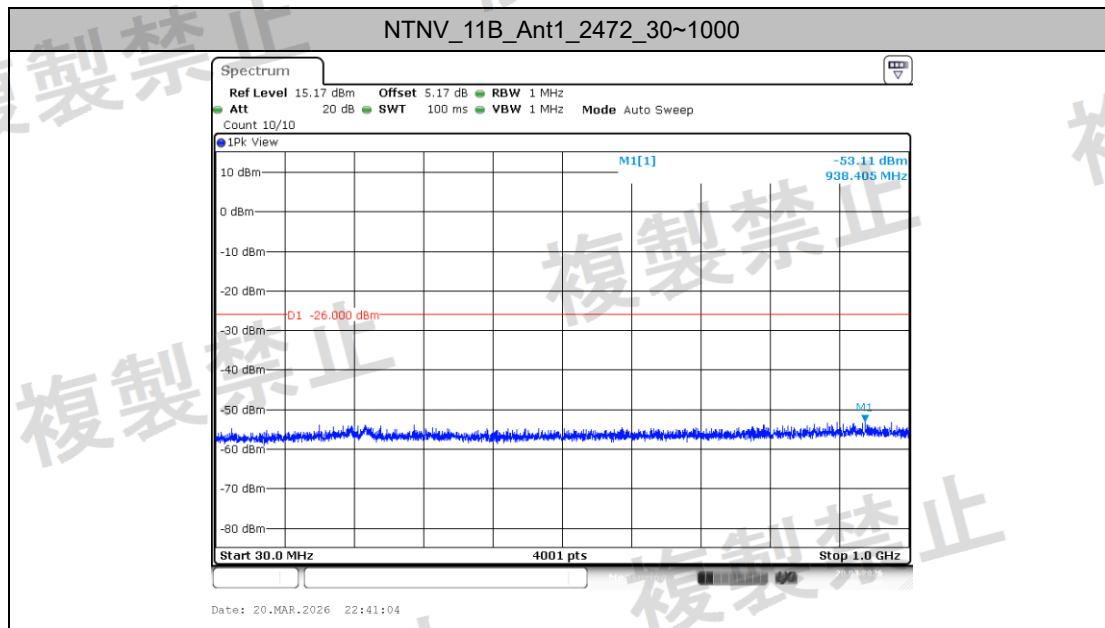


NTNV_11B_Ant1_2442_2483.5~2496.5

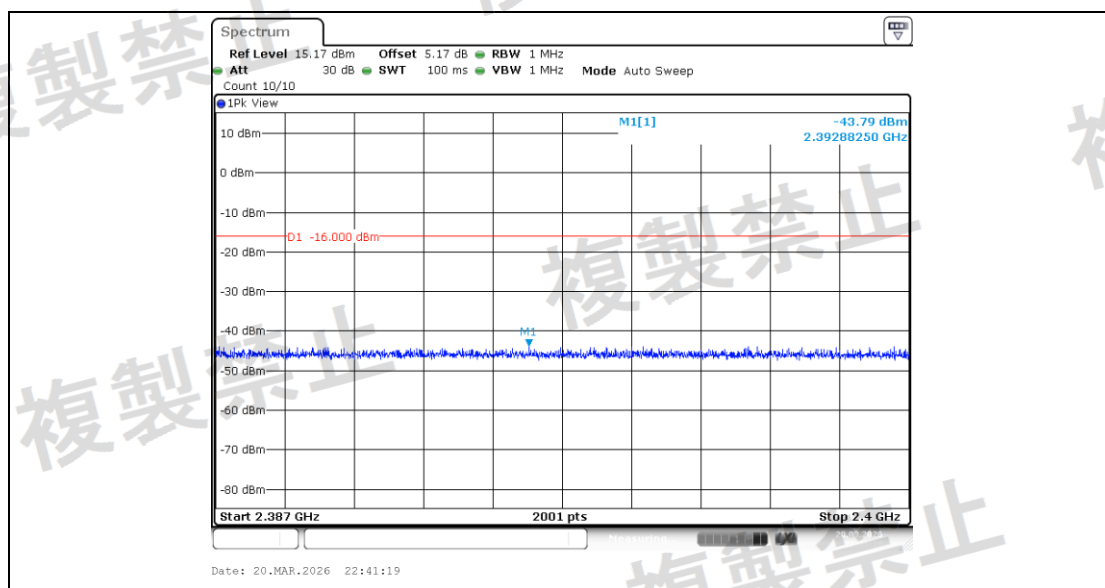


NTNV_11B_Ant1_2442_2496.5~13000

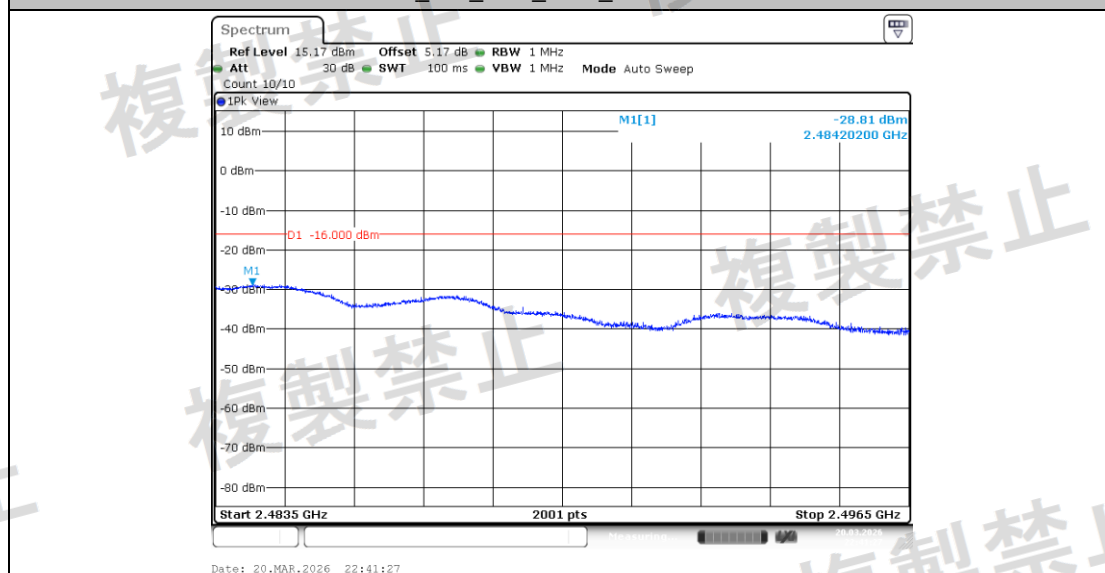




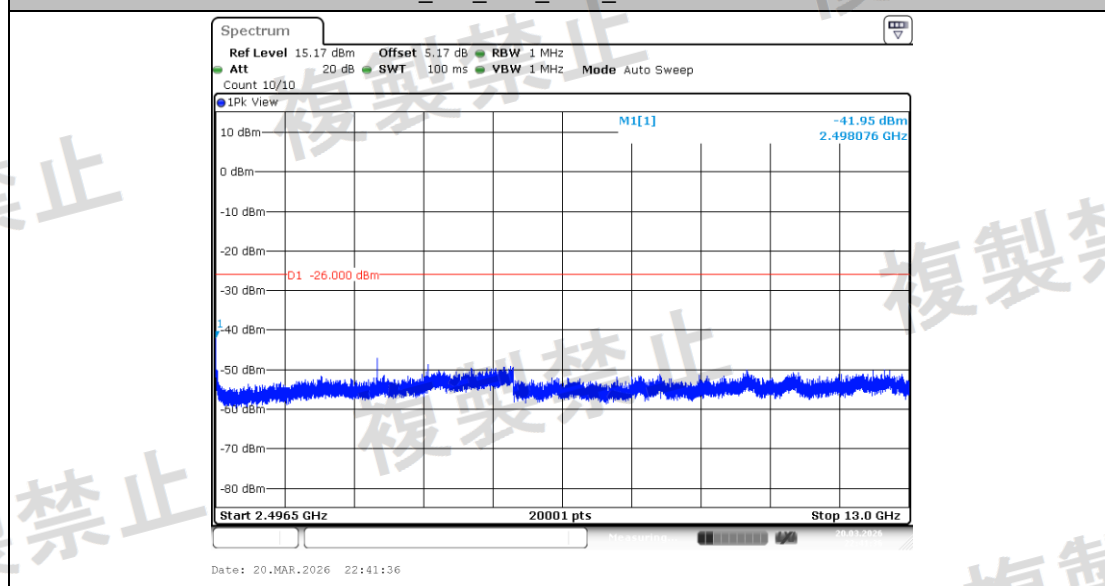
NTNV_11B_Ant1_2472_2387~2400

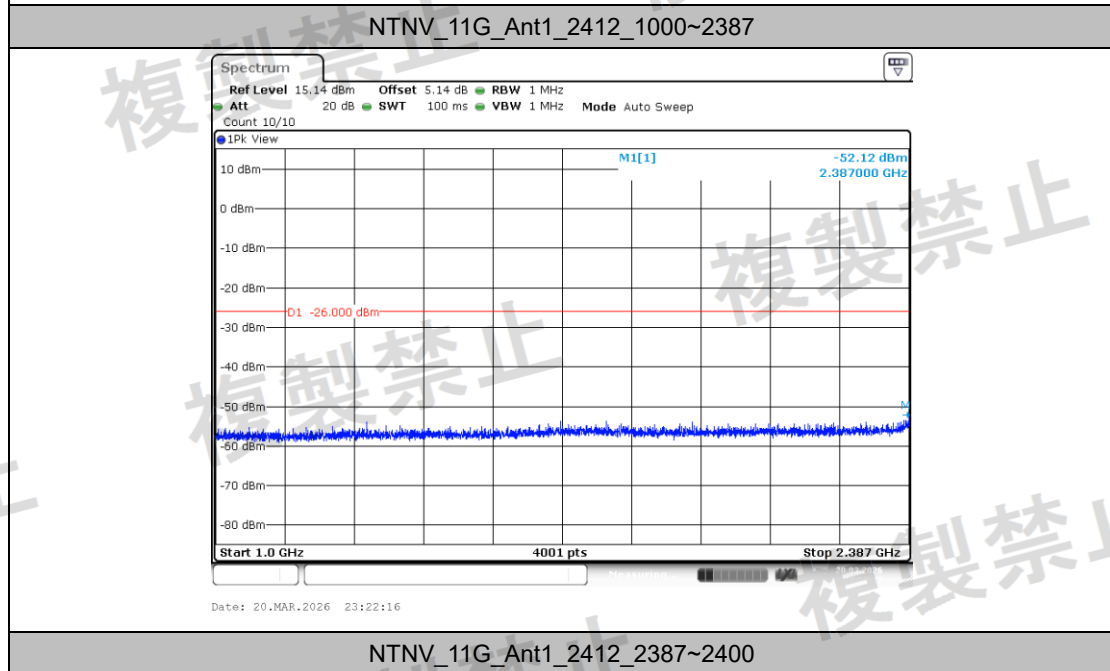
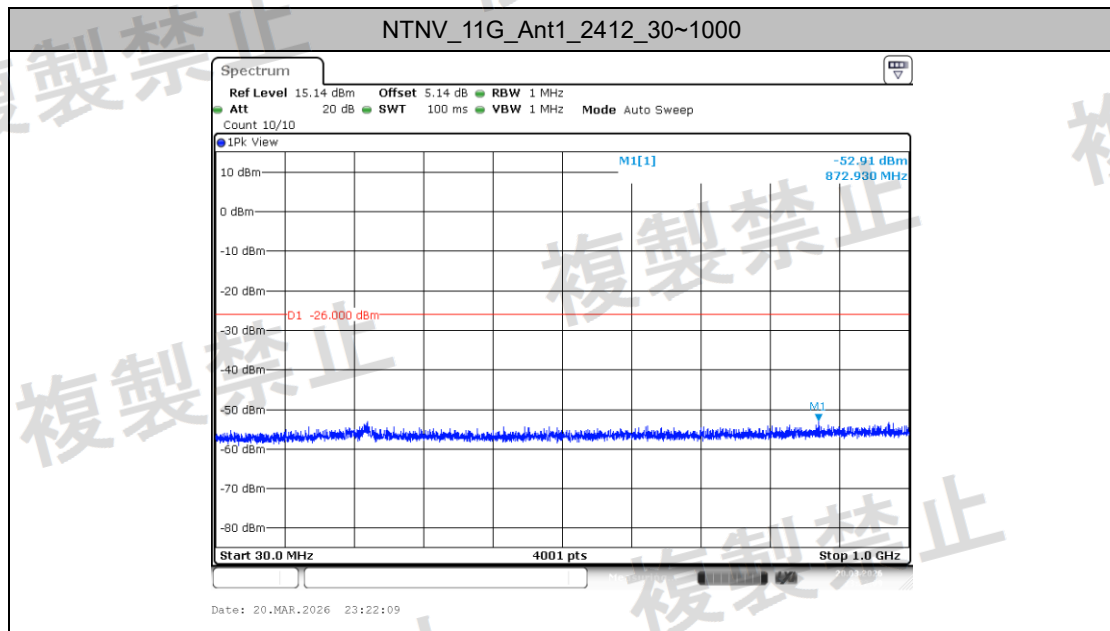


NTNV_11B_Ant1_2472_2483.5~2496.5

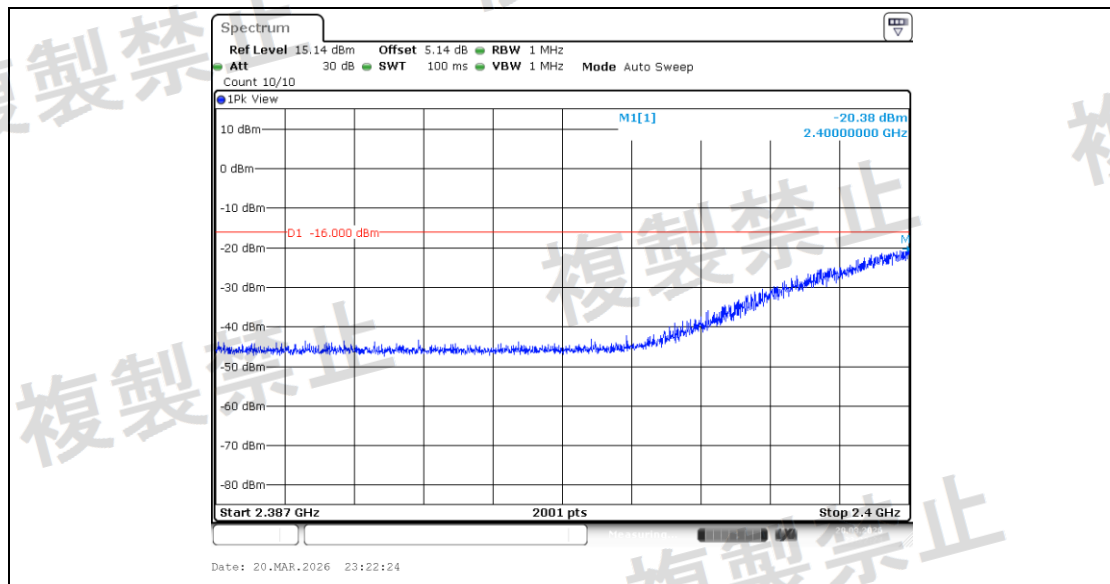


NTNV_11B_Ant1_2472_2496.5~13000

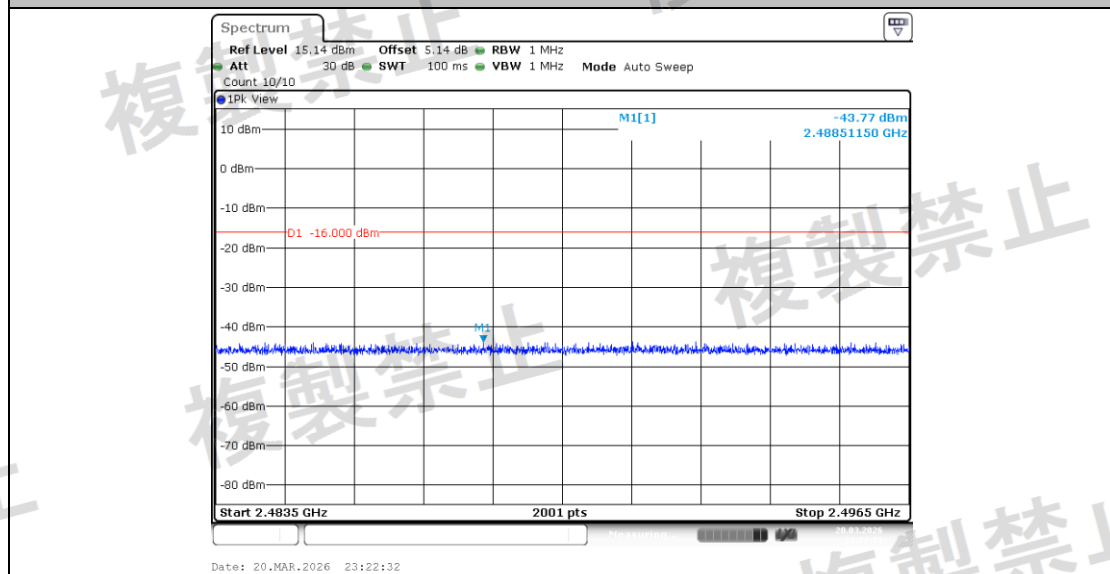




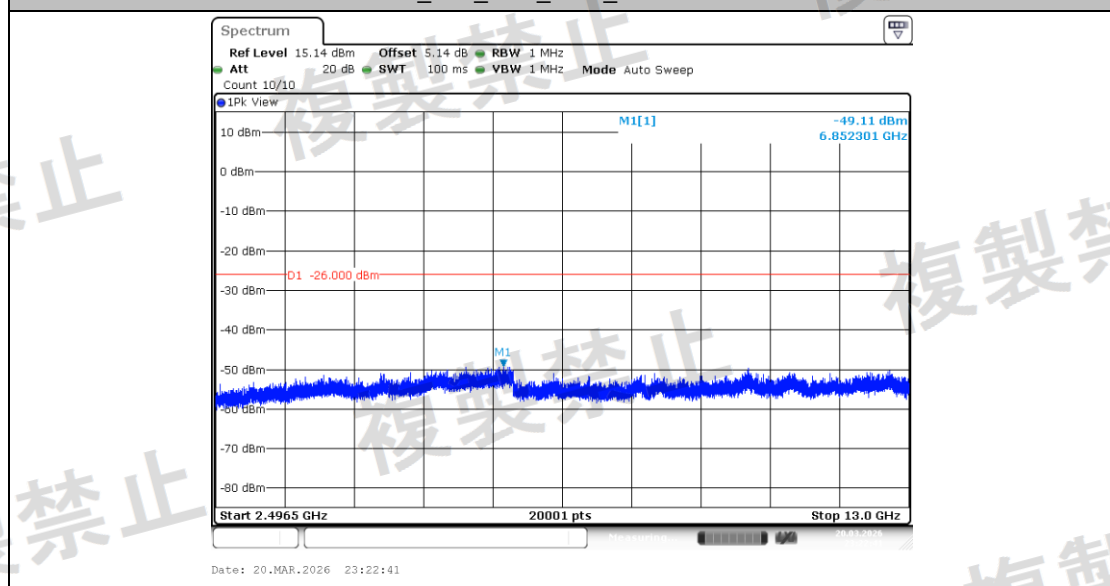
NTNV_11G_Ant1_2412_2387~2400

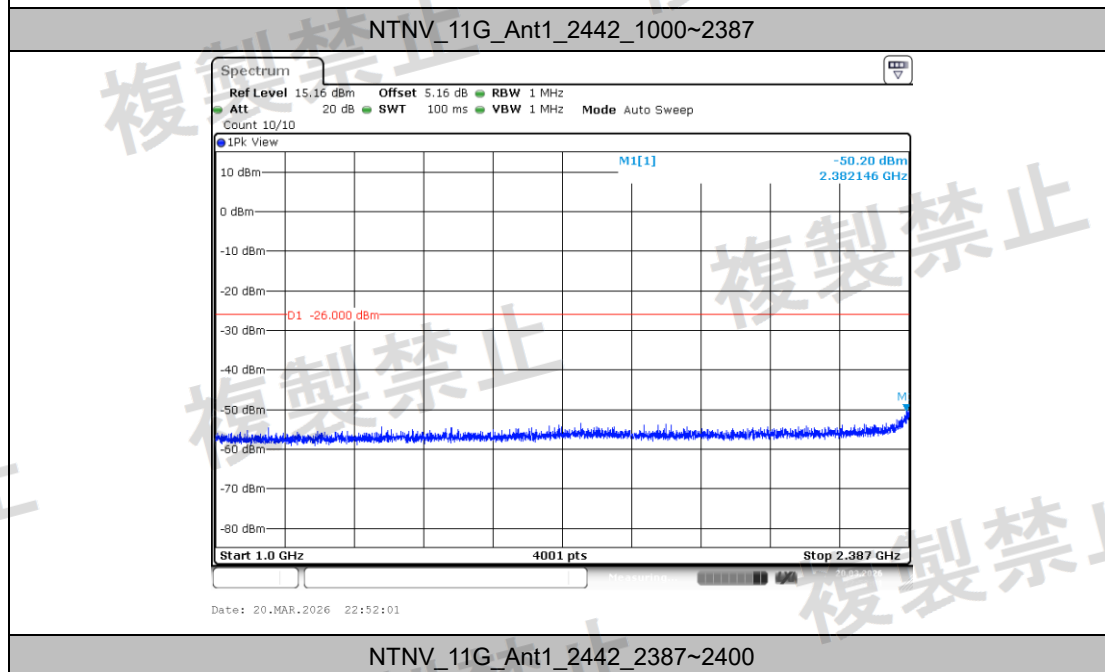
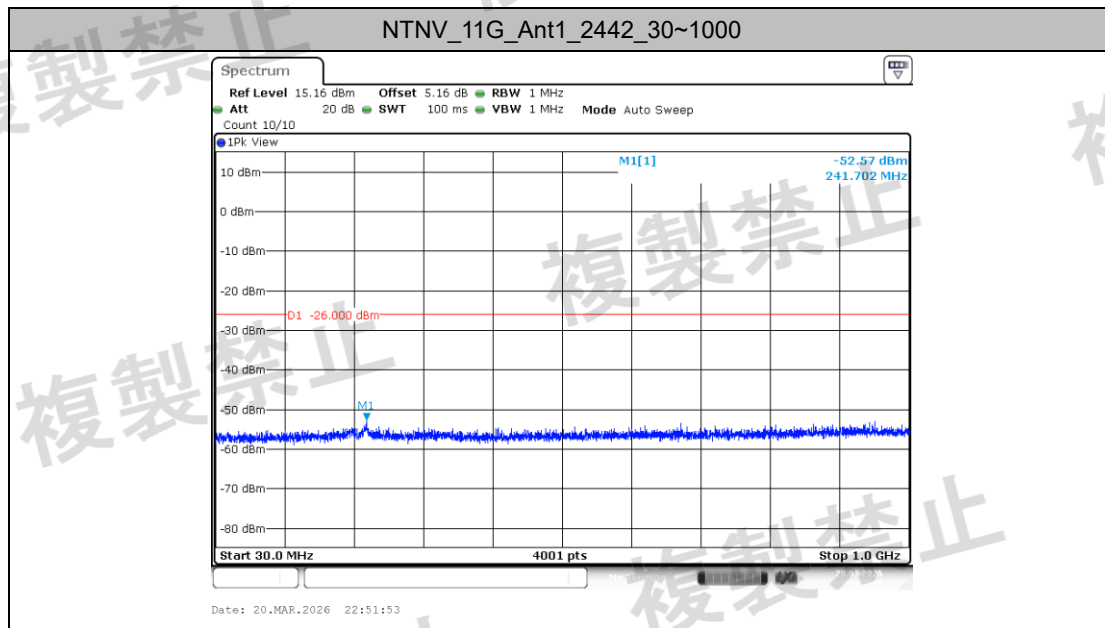


NTNV_11G_Ant1_2412_2483.5~2496.5

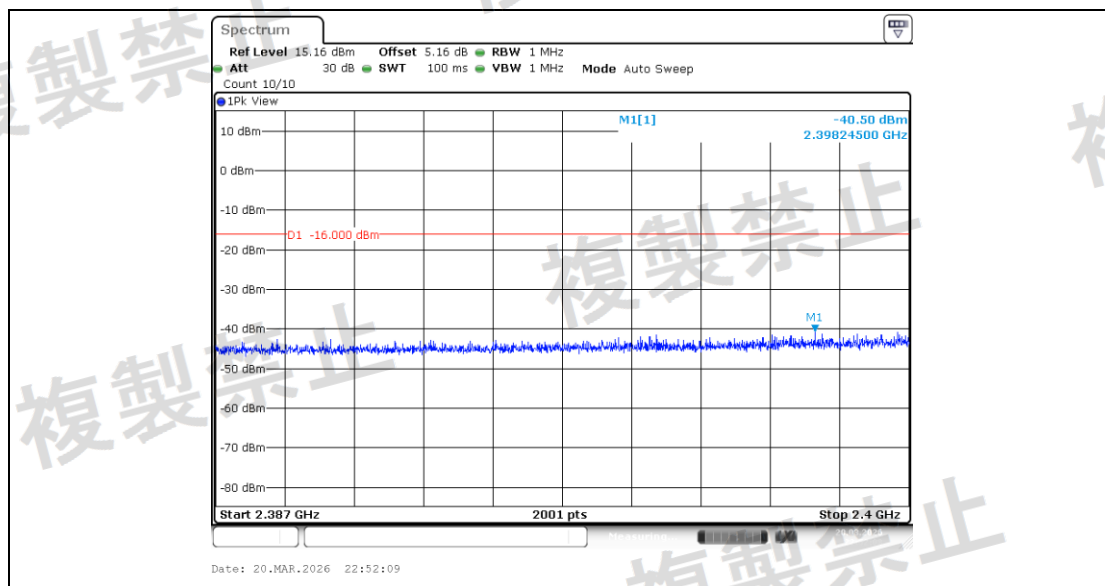


NTNV_11G_Ant1_2412_2496.5~13000

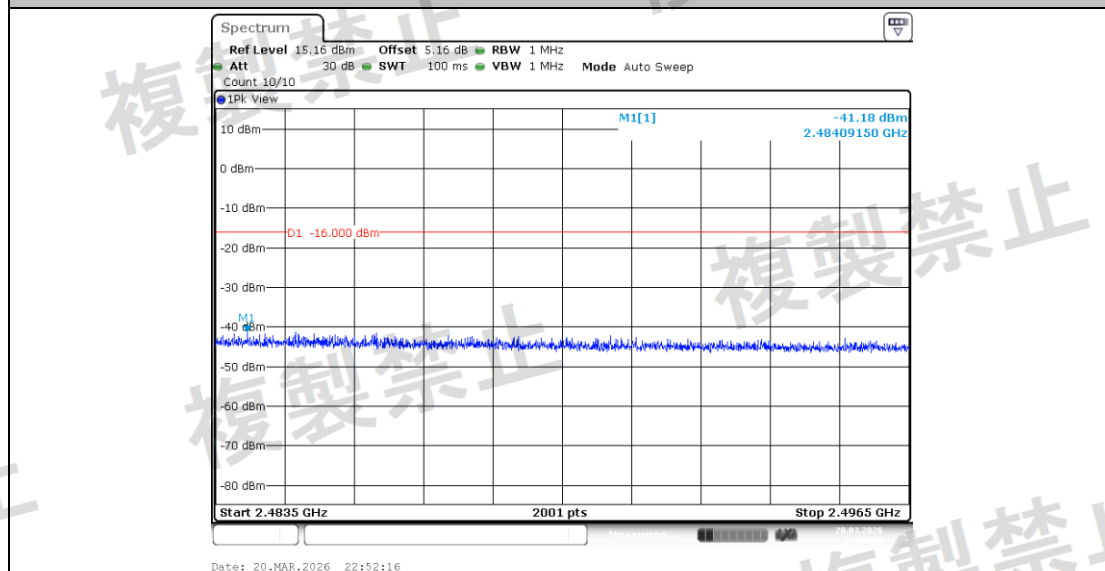




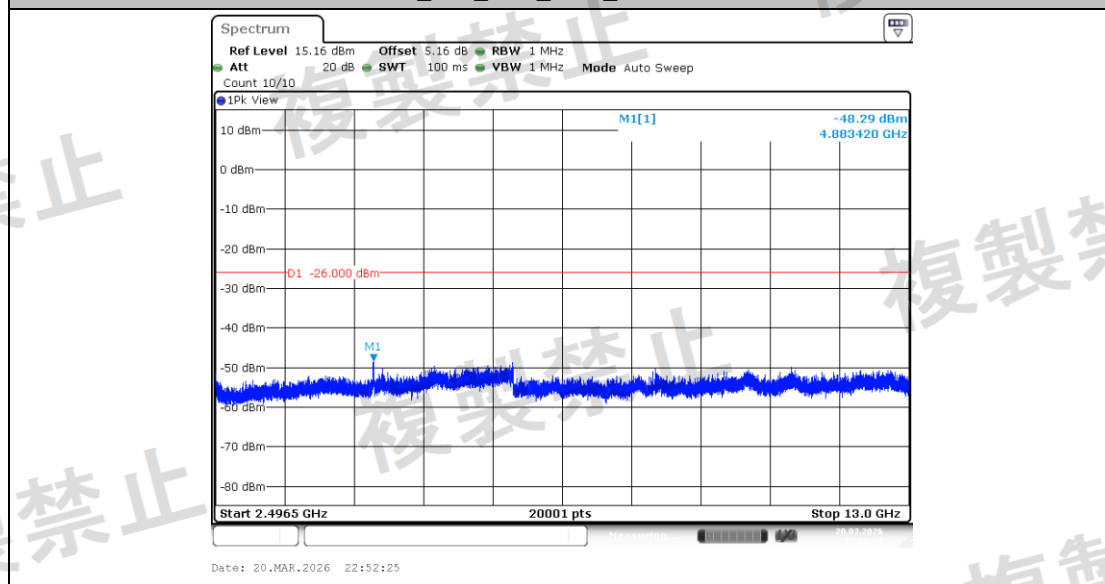
NTNV_11G_Ant1_2442_2387~2400

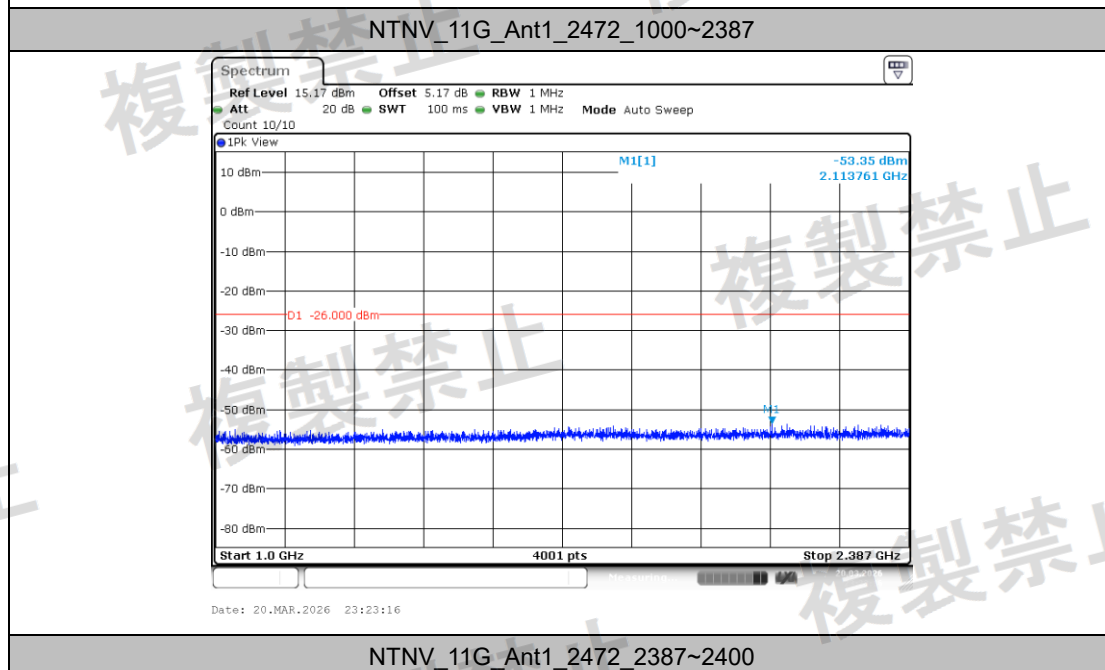
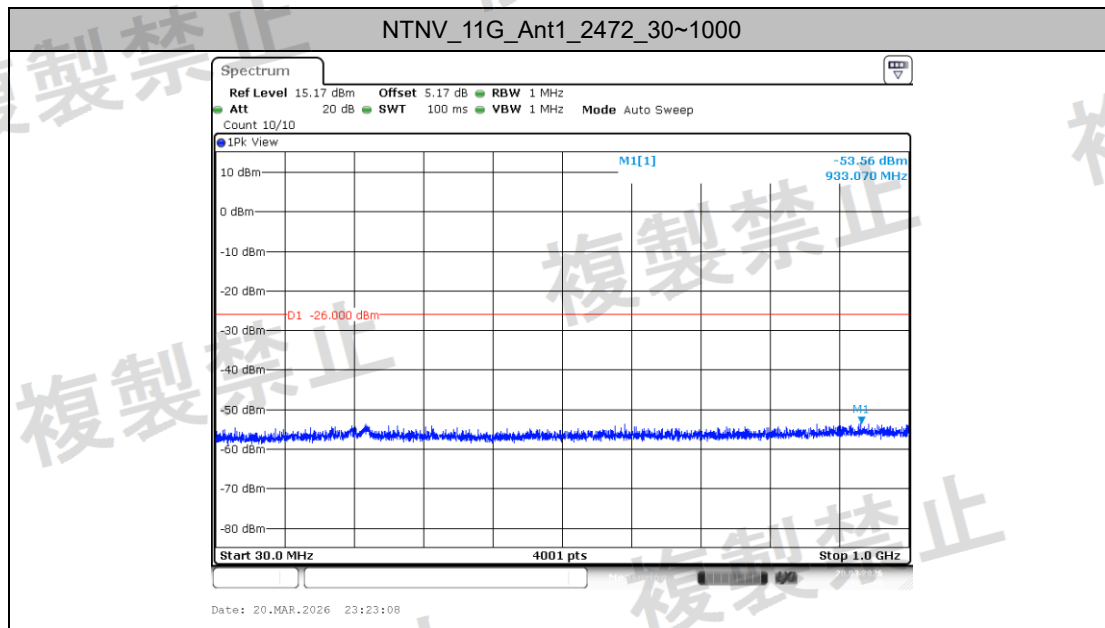


NTNV_11G_Ant1_2442_2483.5~2496.5

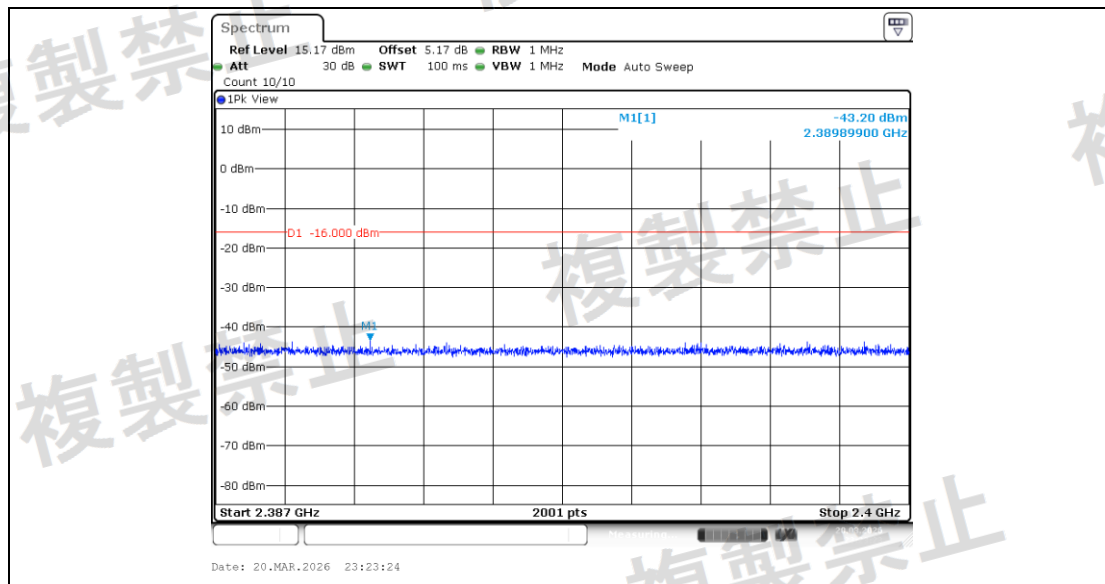


NTNV_11G_Ant1_2442_2496.5~13000

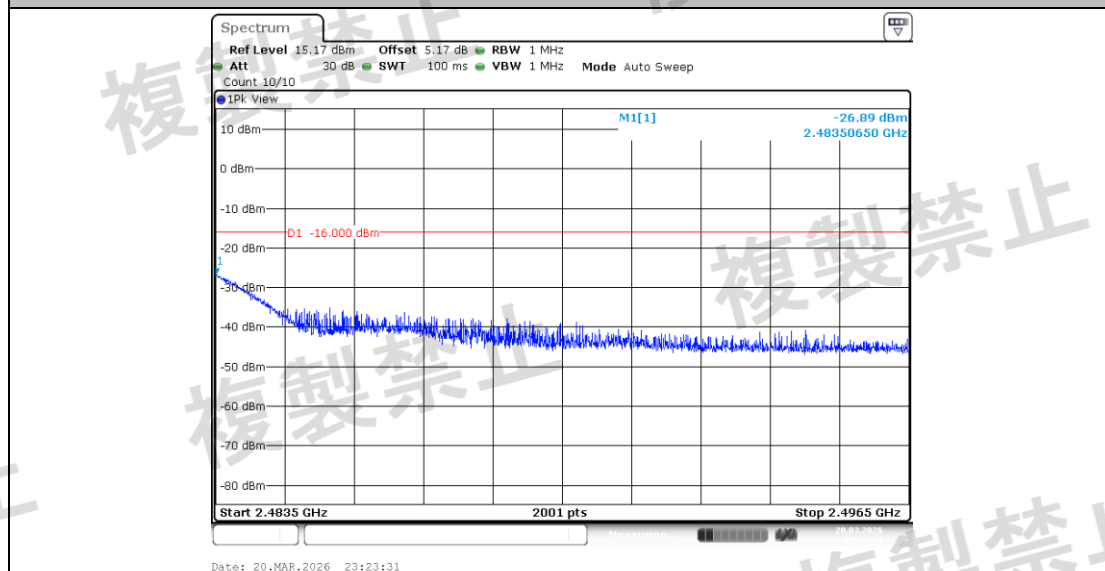




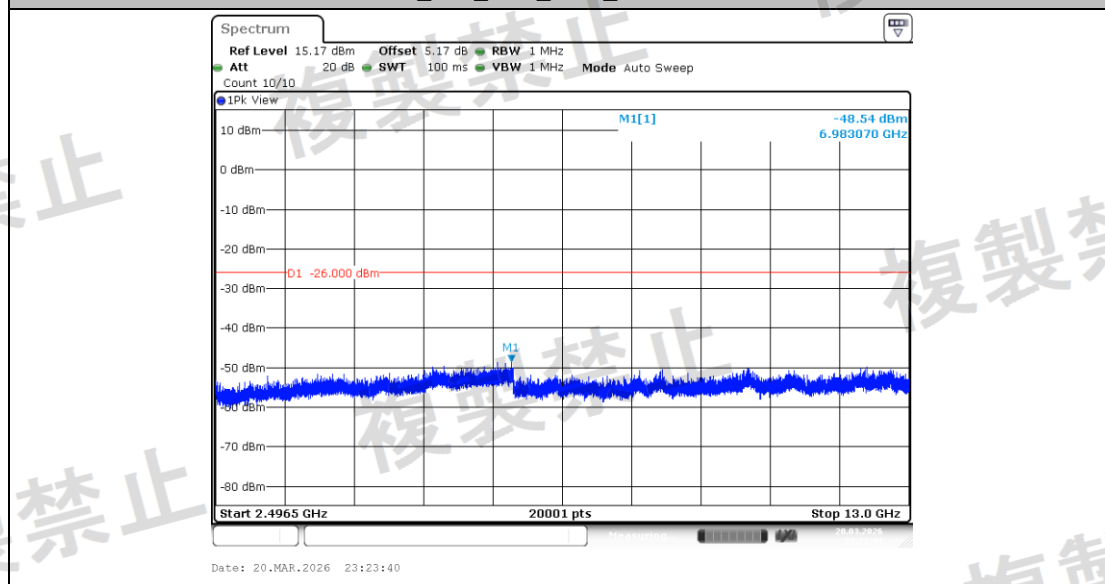
NTNV_11G_Ant1_2472_2387~2400

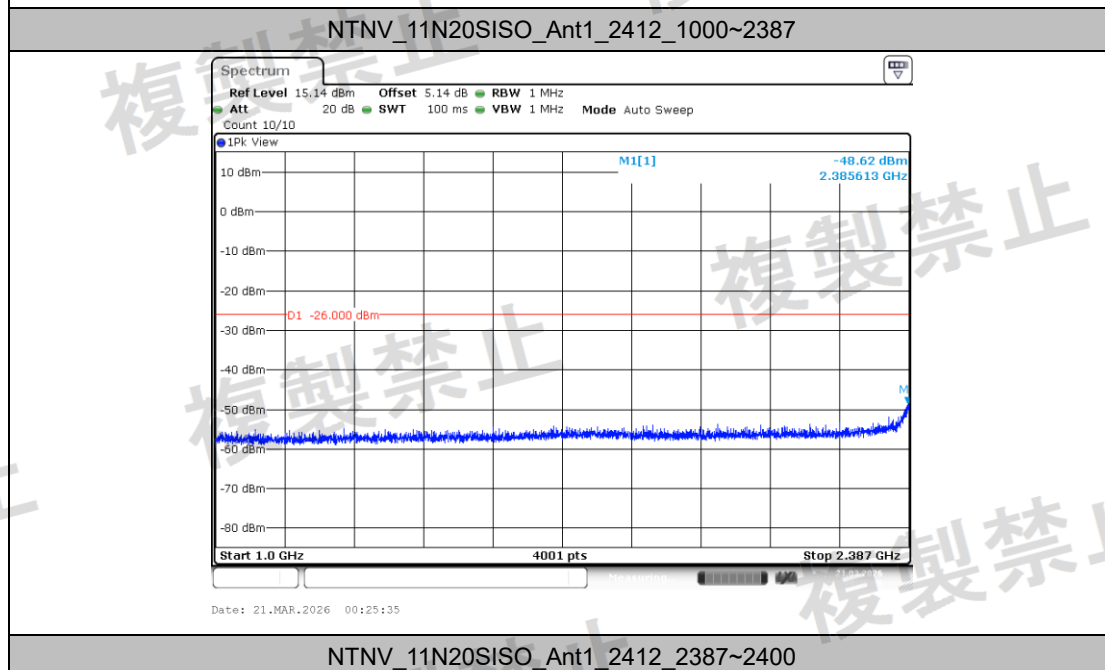
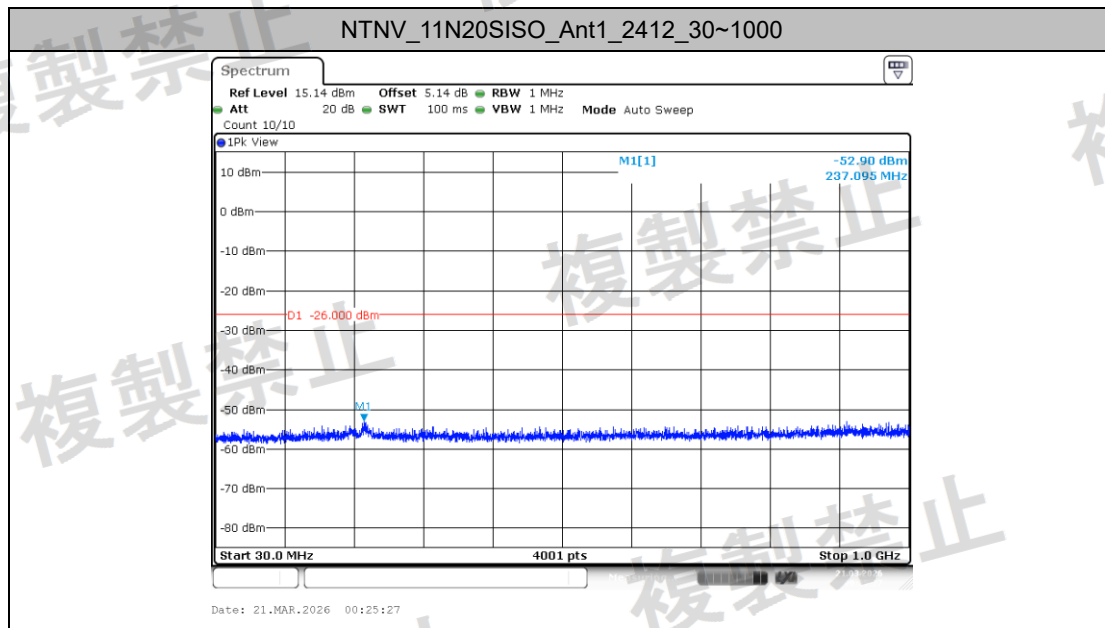


NTNV_11G_Ant1_2472_2483.5~2496.5

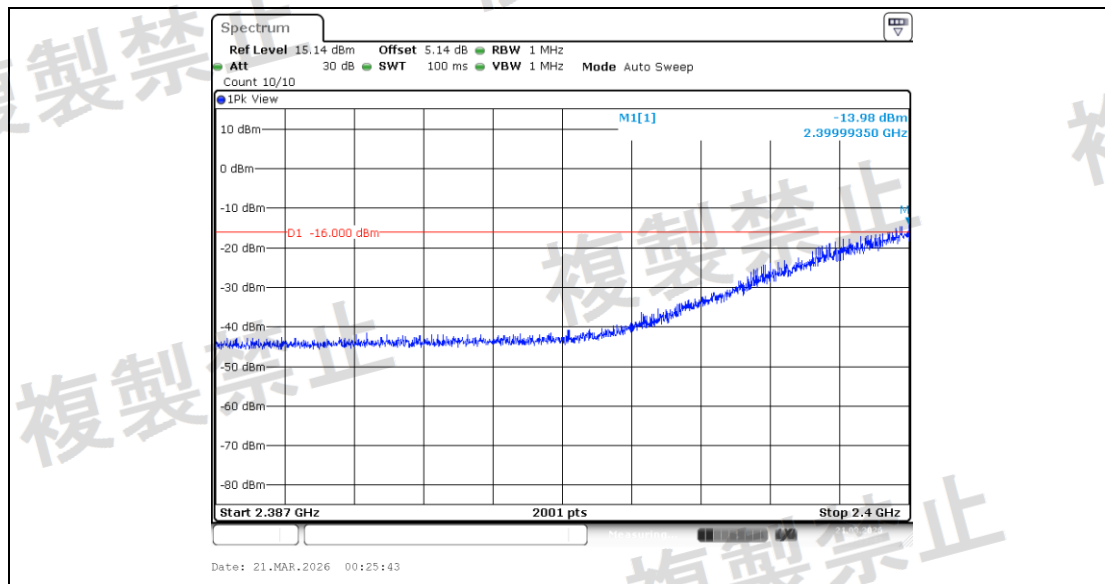


NTNV_11G_Ant1_2472_2496.5~13000

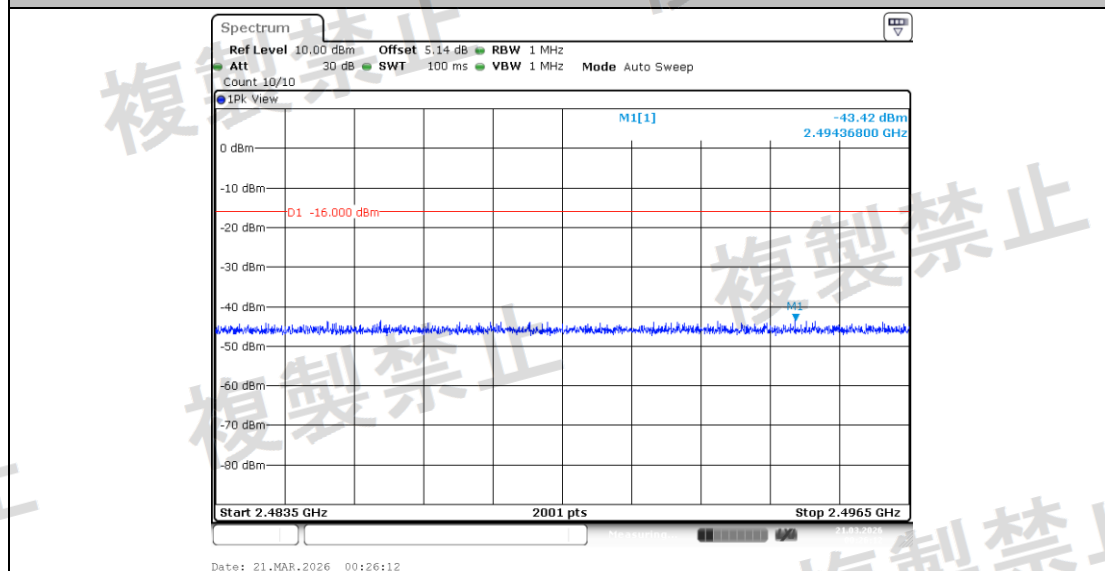




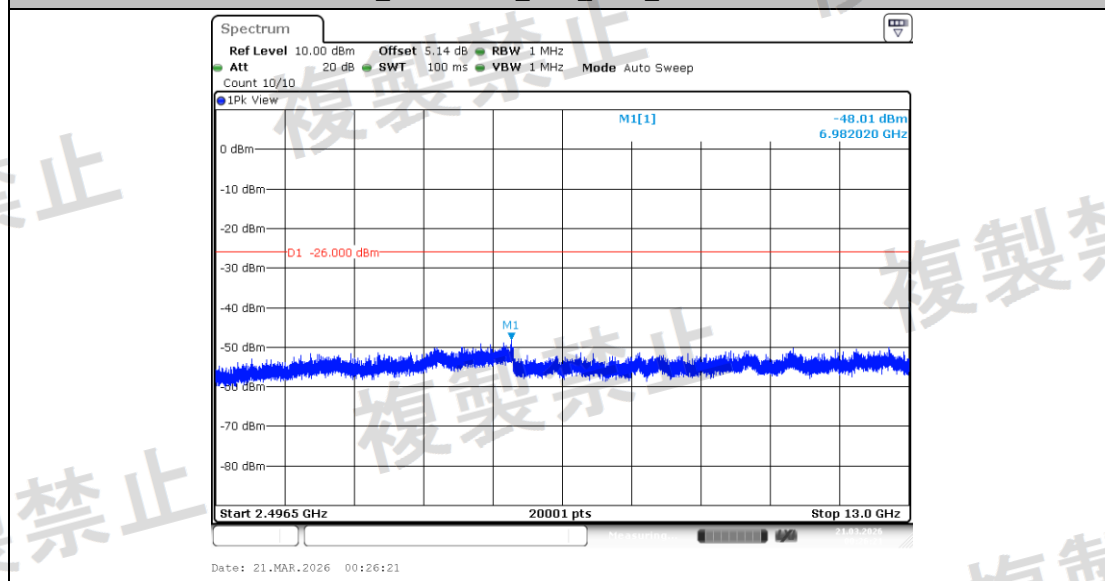
NTNV_11N20SISO_Ant1_2412_2387~2400

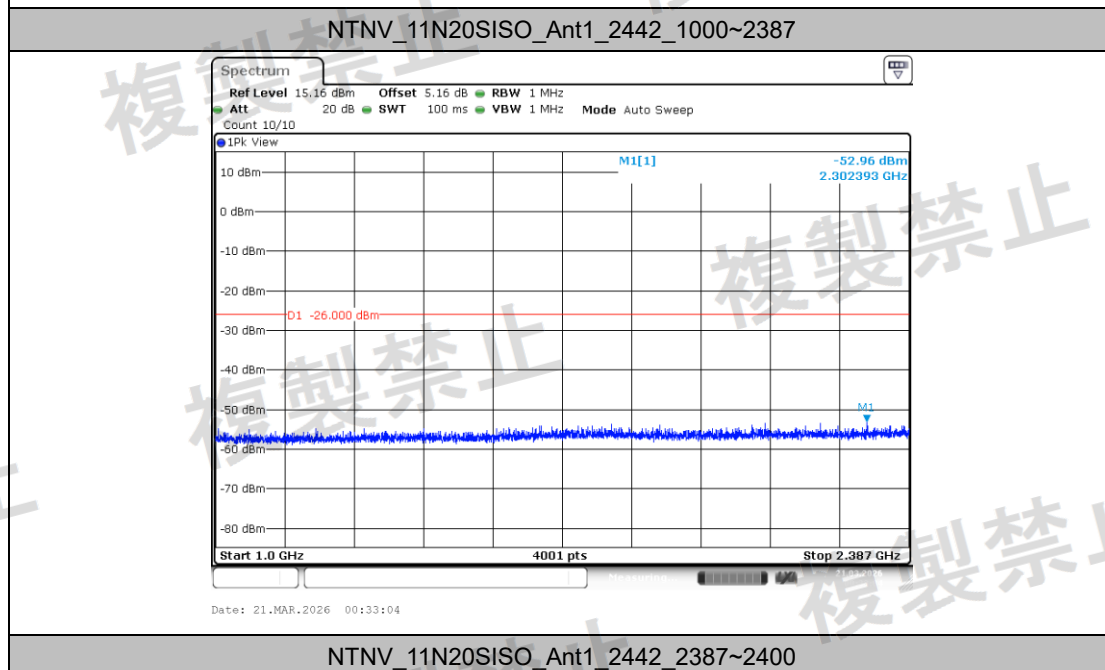
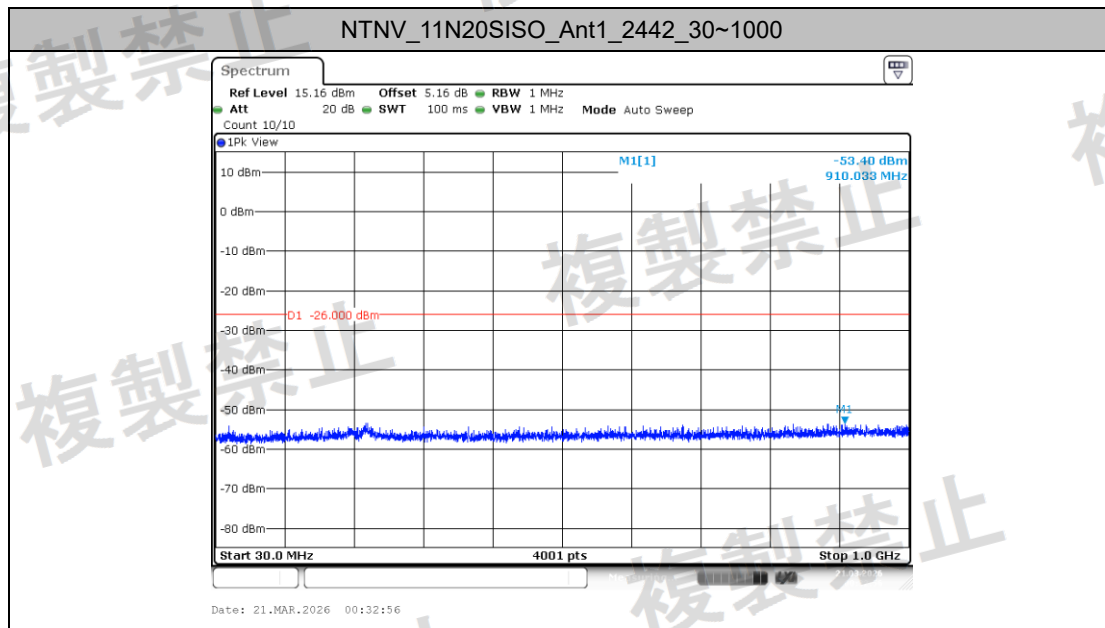


NTNV_11N20SISO_Ant1_2412_2483.5~2496.5

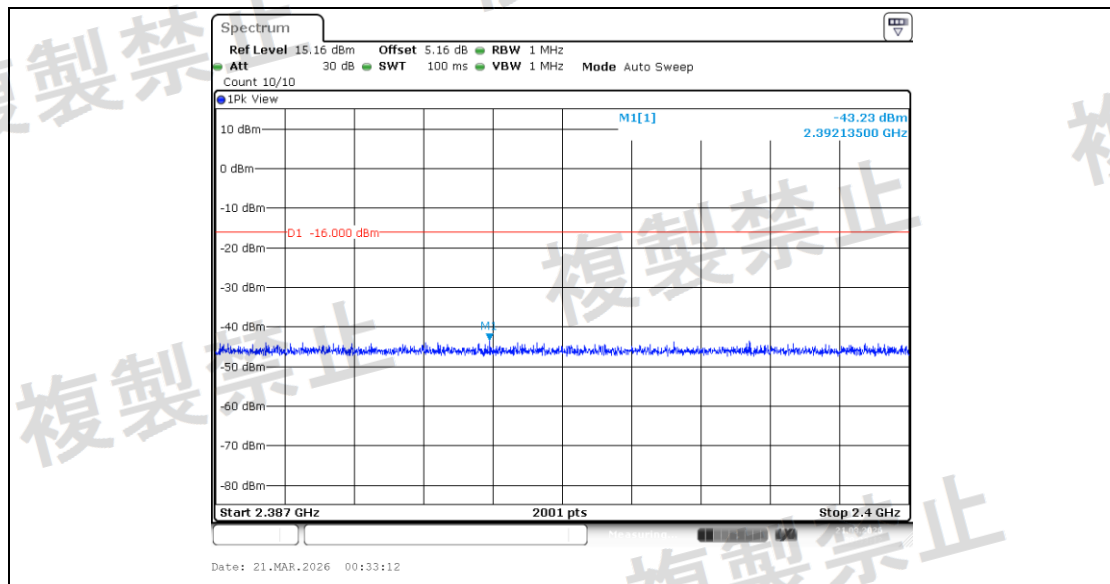


NTNV_11N20SISO_Ant1_2412_2496.5~13000

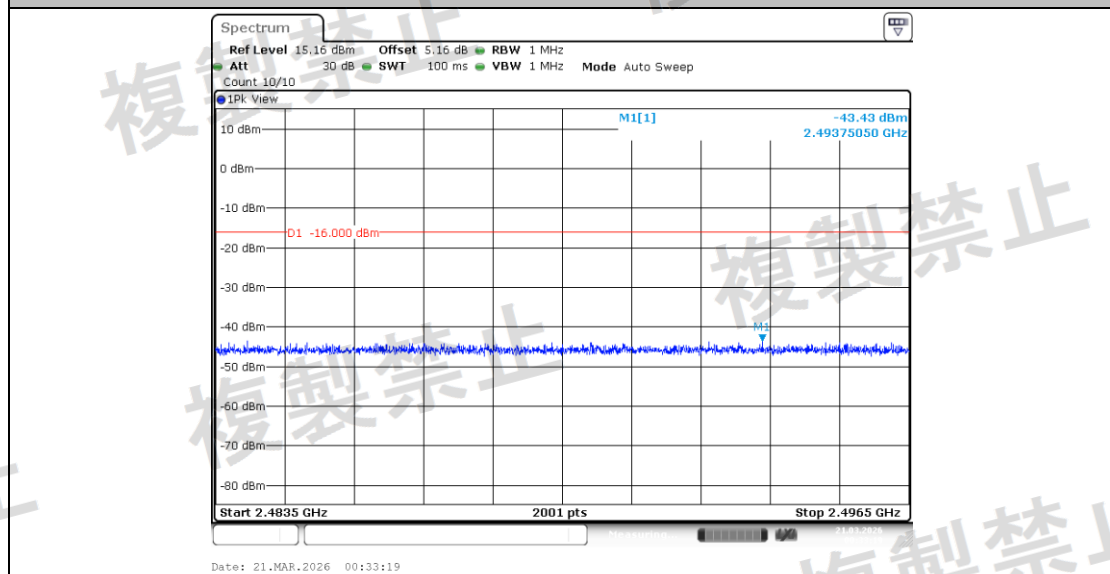




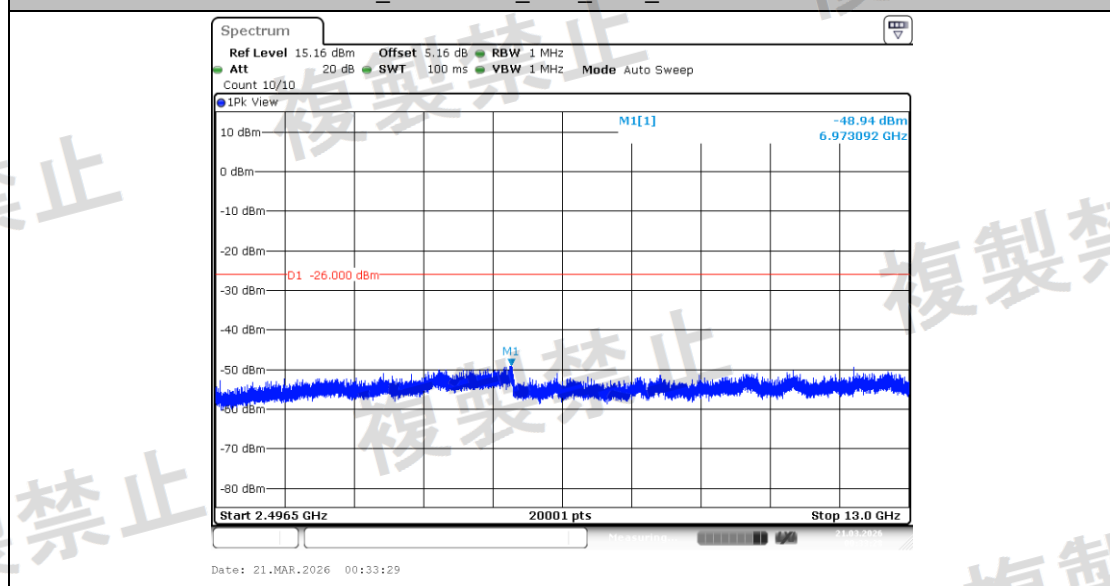
NTNV_11N20SISO_Ant1_2442_2387~2400

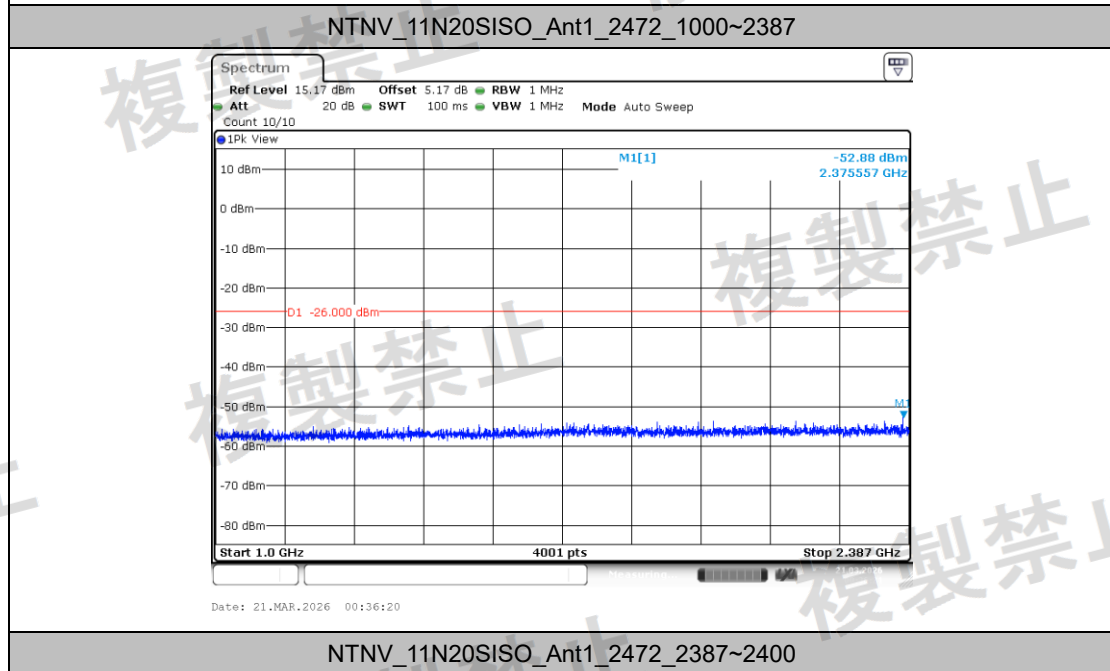
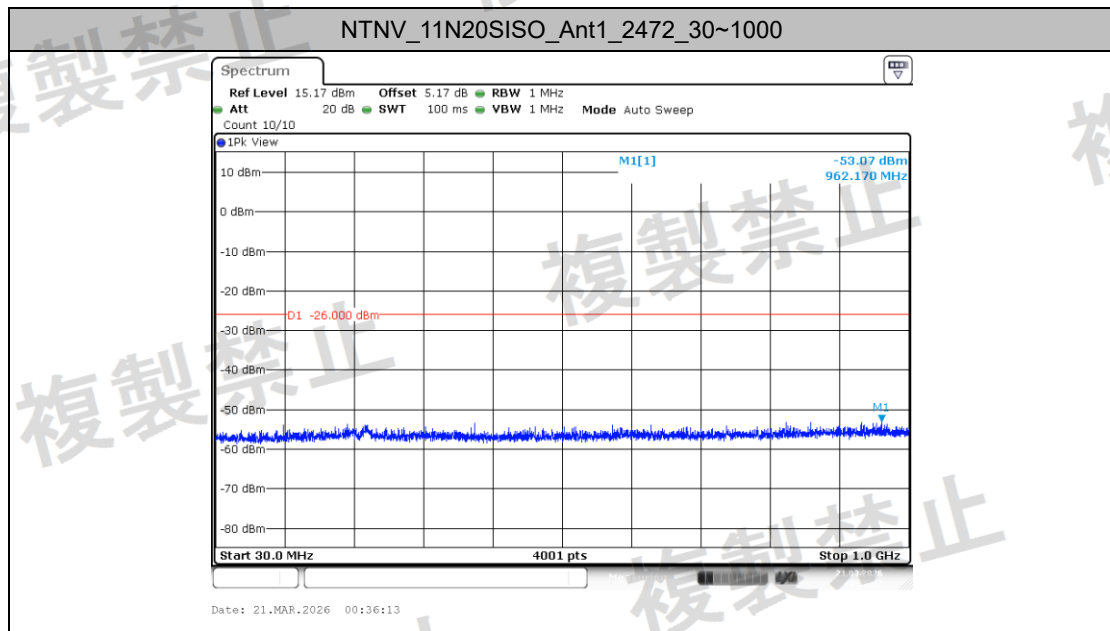


NTNV_11N20SISO_Ant1_2442_2483.5~2496.5

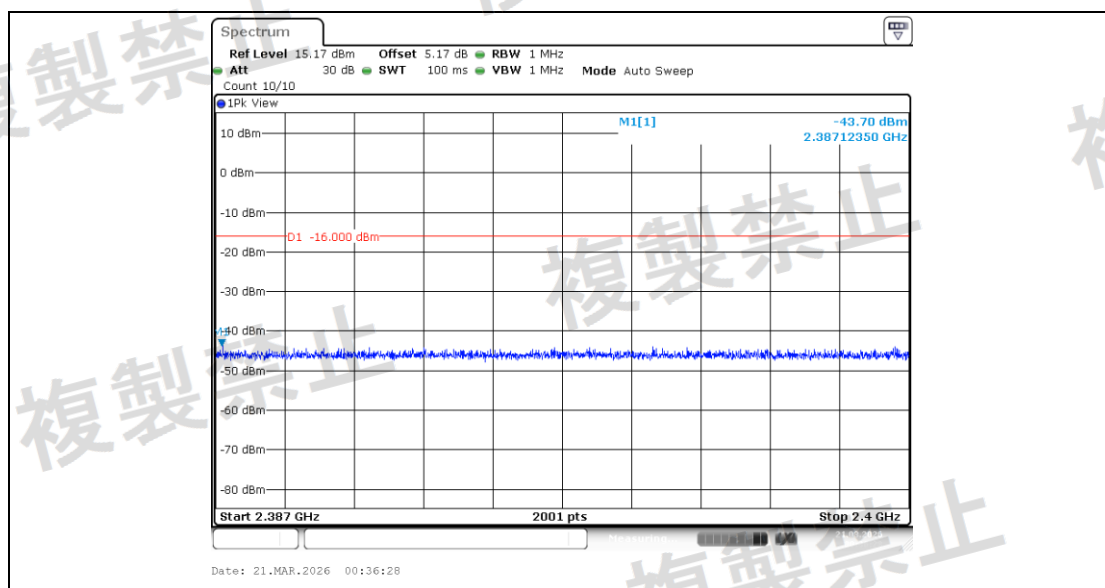


NTNV_11N20SISO_Ant1_2442_2496.5~13000

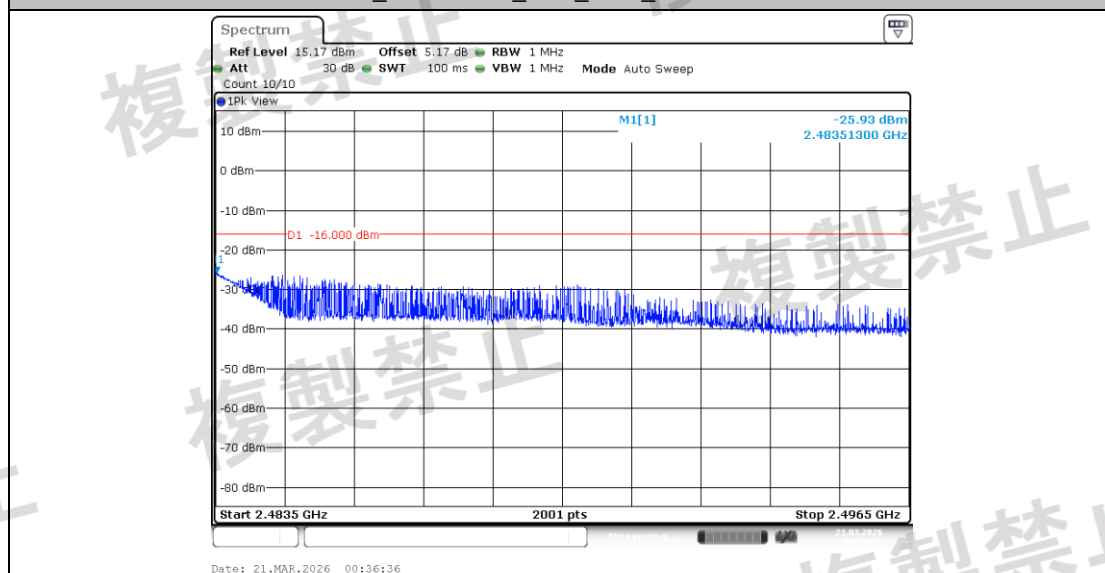




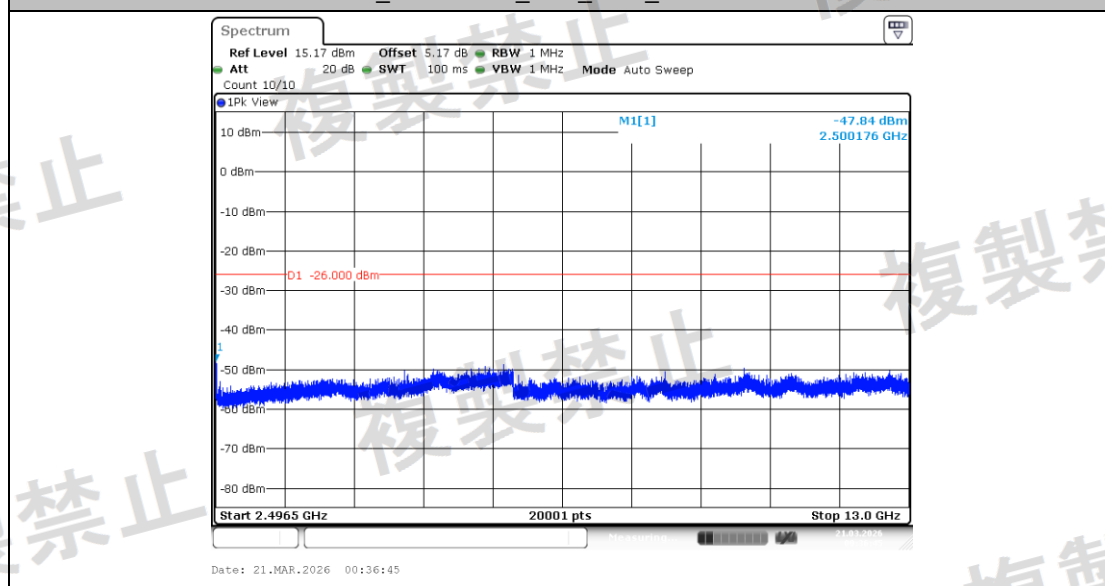
NTNV_11N20SISO_Ant1_2472_2387~2400

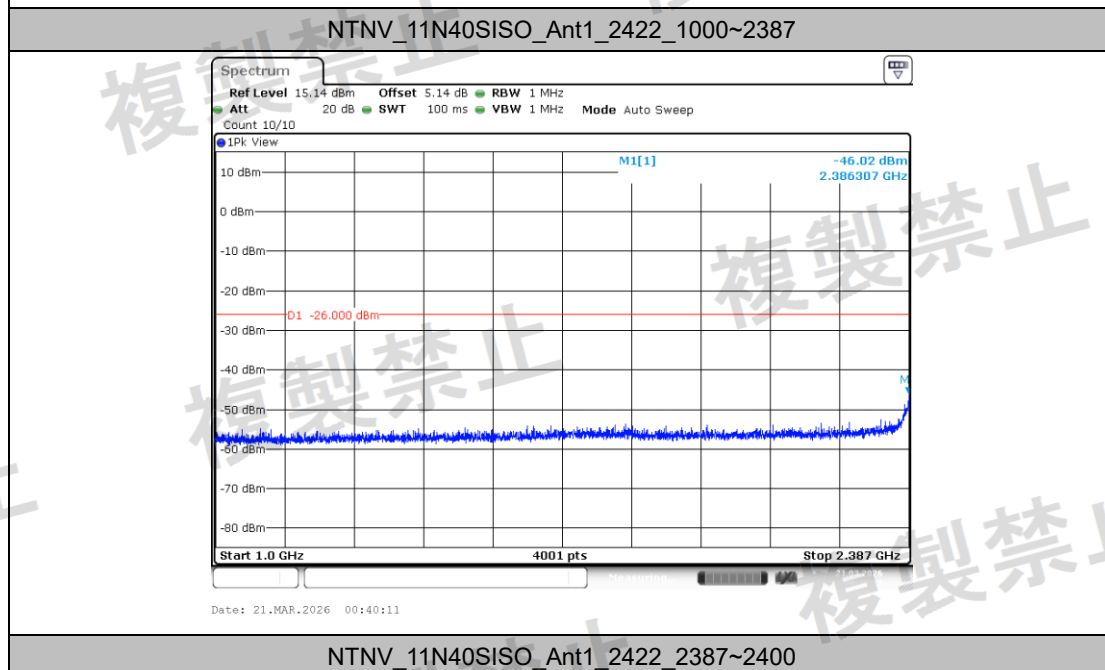
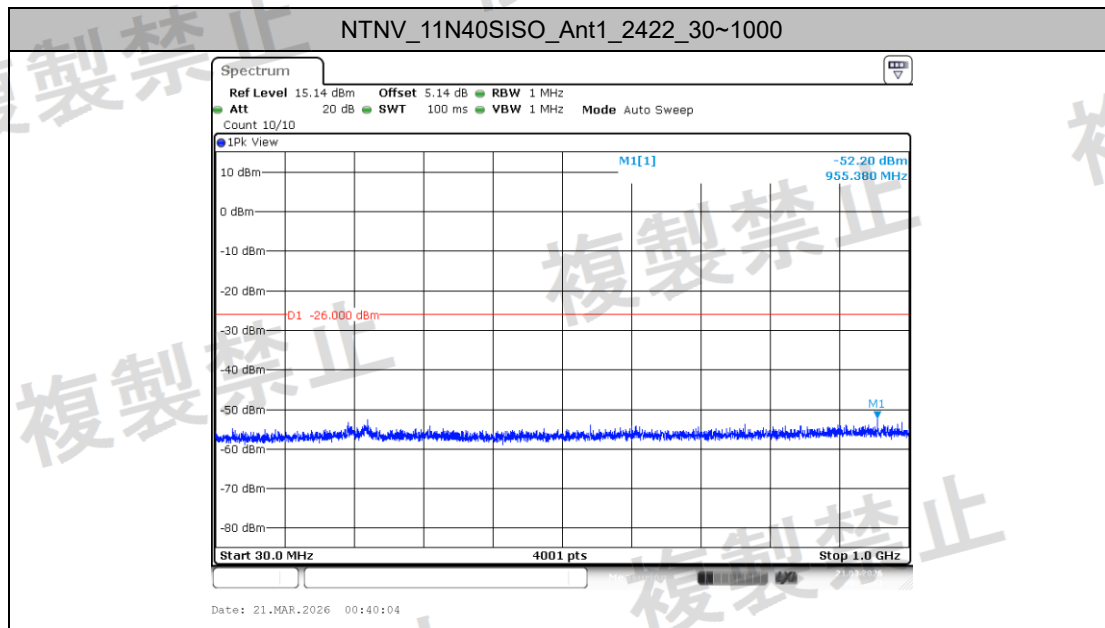


NTNV_11N20SISO_Ant1_2472_2483.5~2496.5

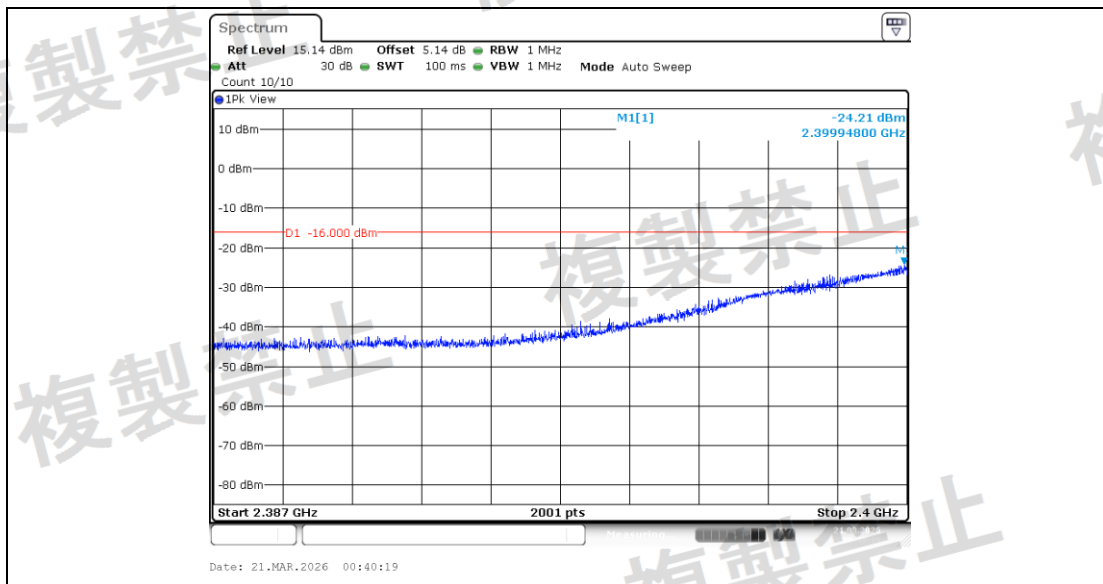


NTNV_11N20SISO_Ant1_2472_2496.5~13000

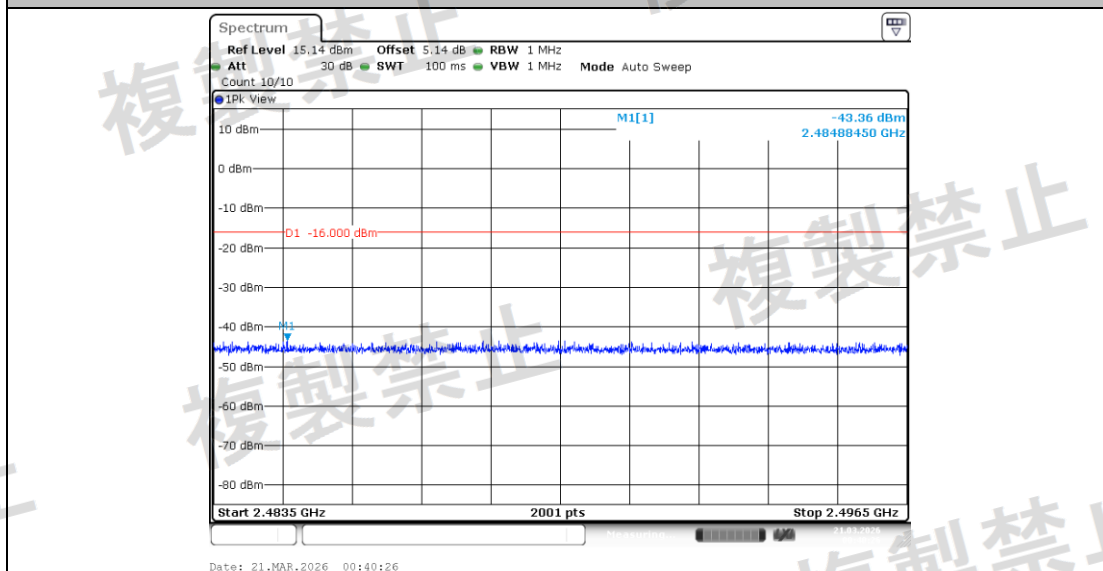




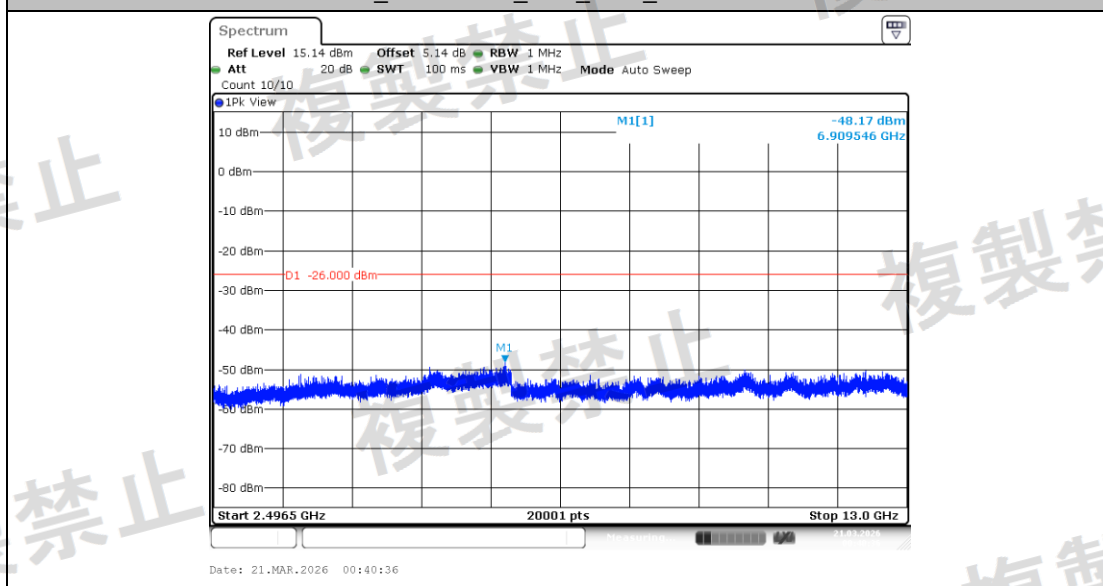
NTNV_11N40SISO_Ant1_2422_2387~2400

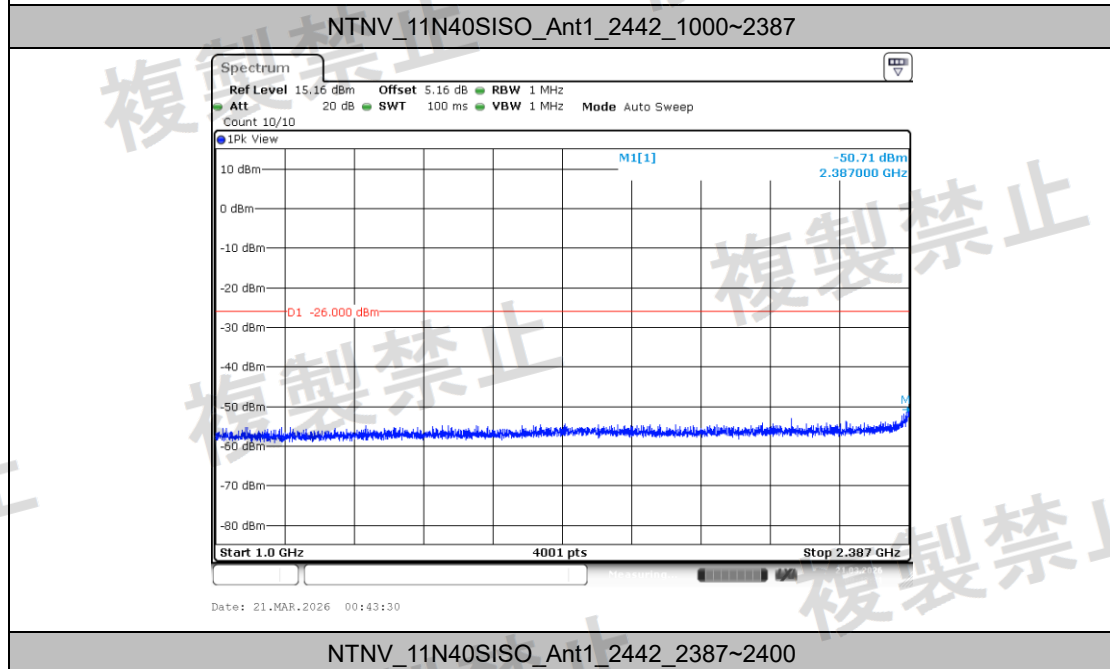
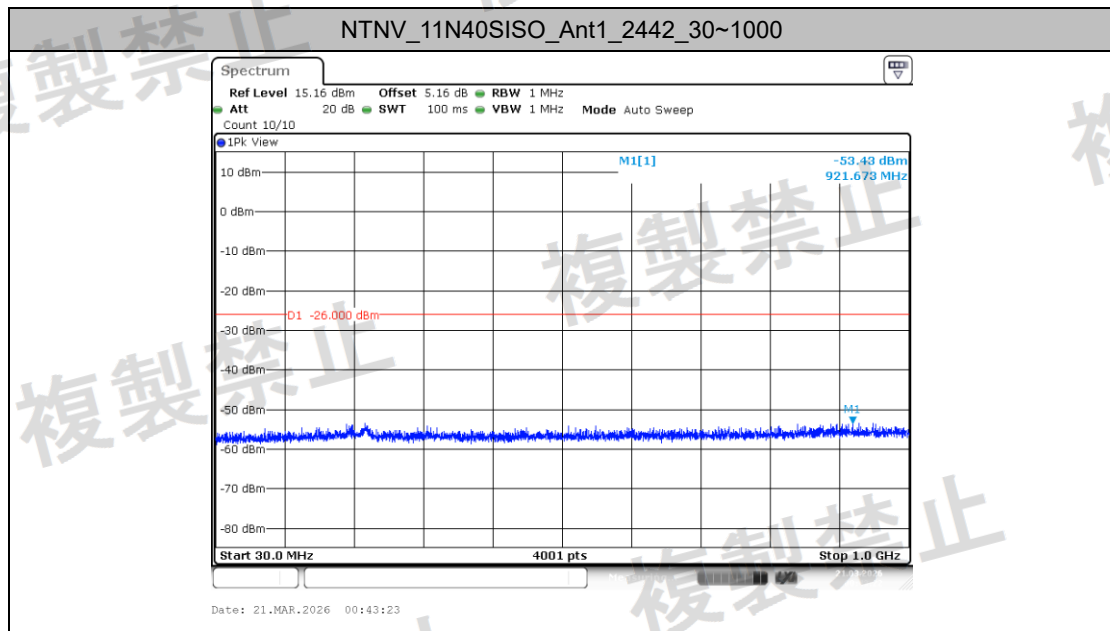


NTNV_11N40SISO_Ant1_2422_2483.5~2496.5

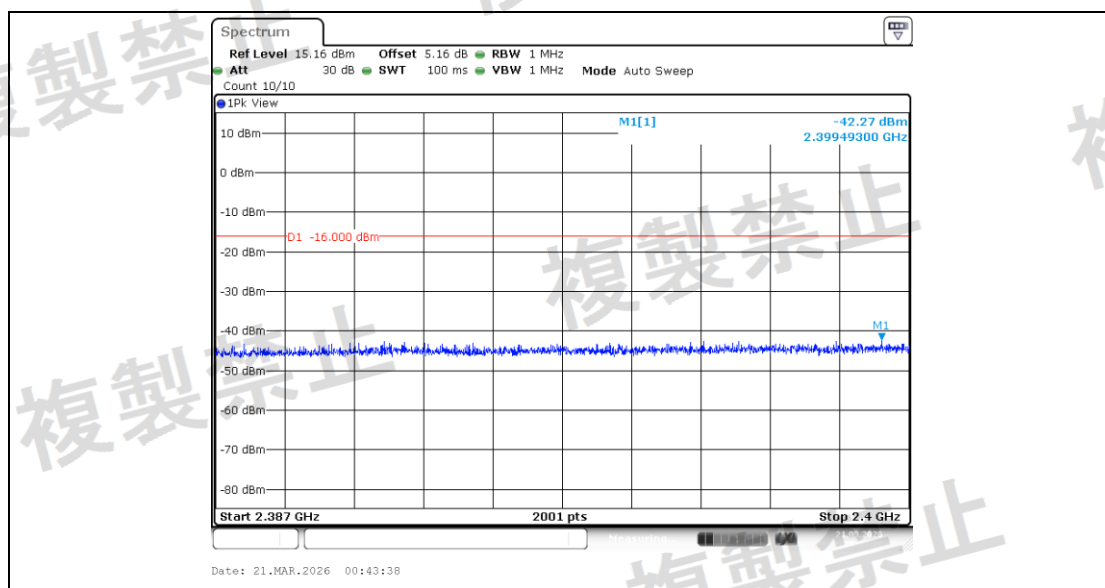


NTNV_11N40SISO_Ant1_2422_2496.5~13000

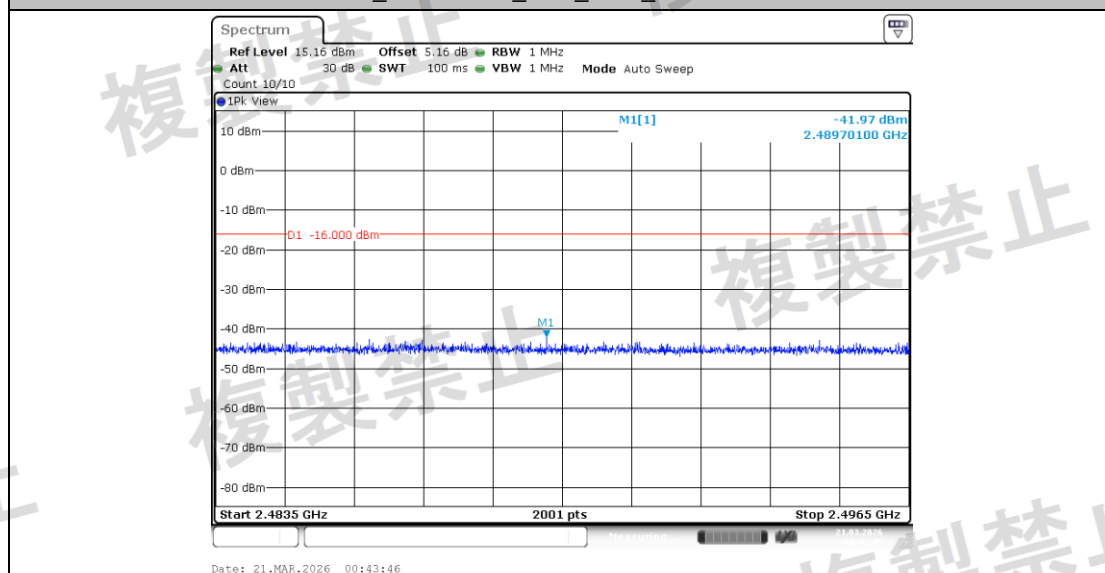




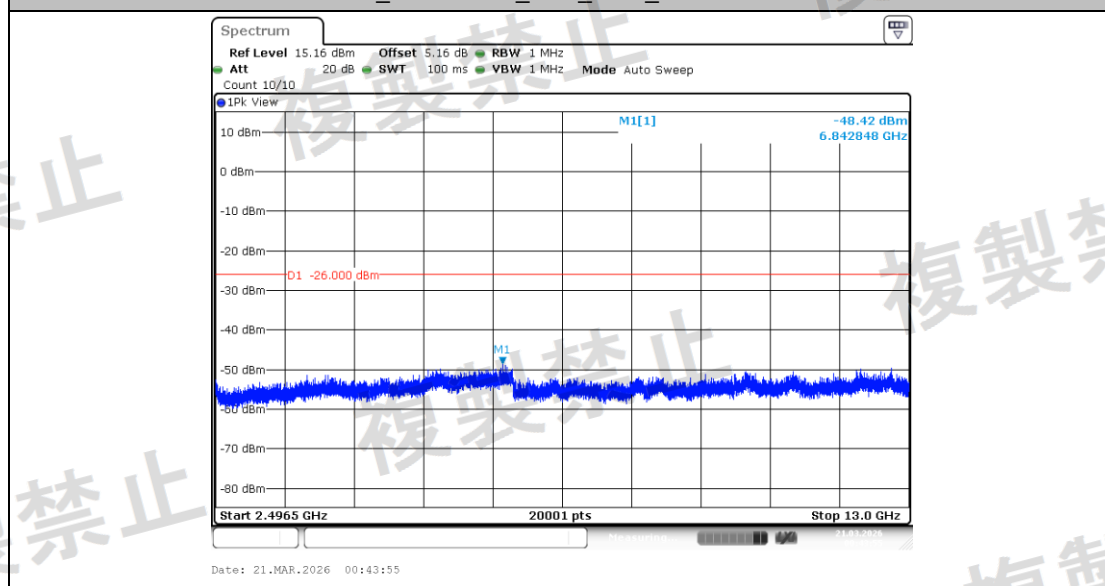
NTNV_11N40SISO_Ant1_2442_2387~2400

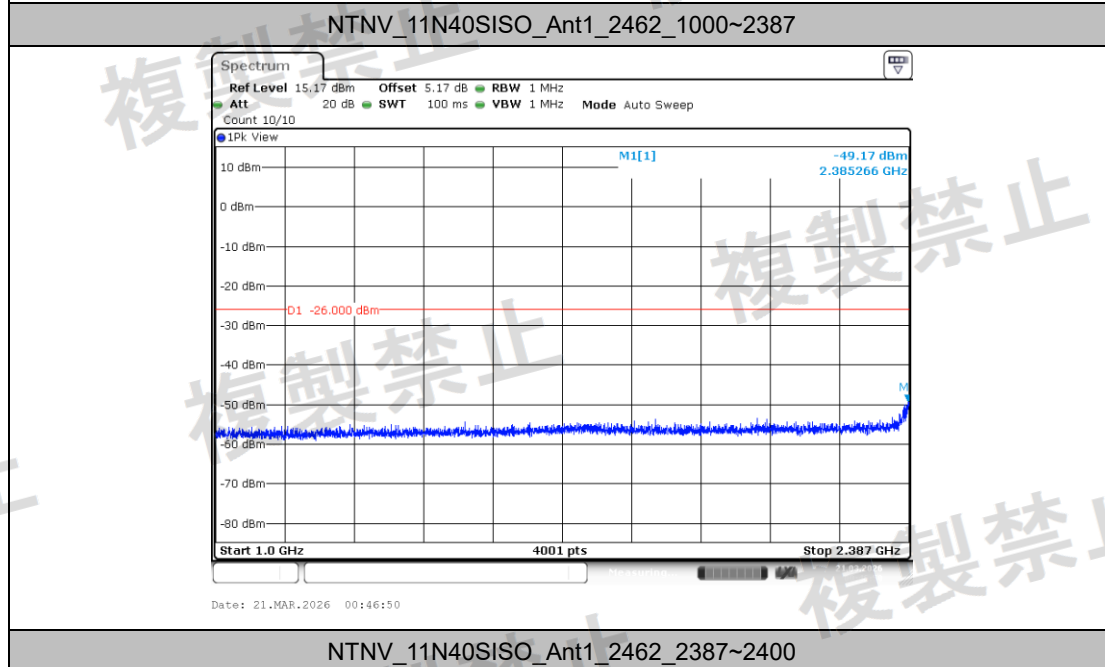
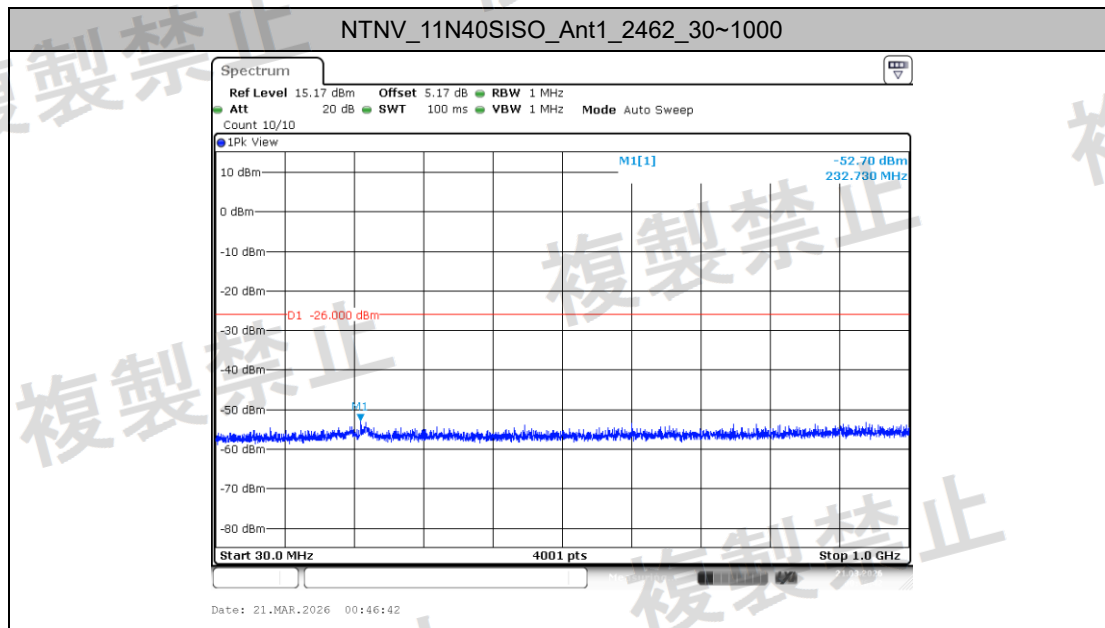


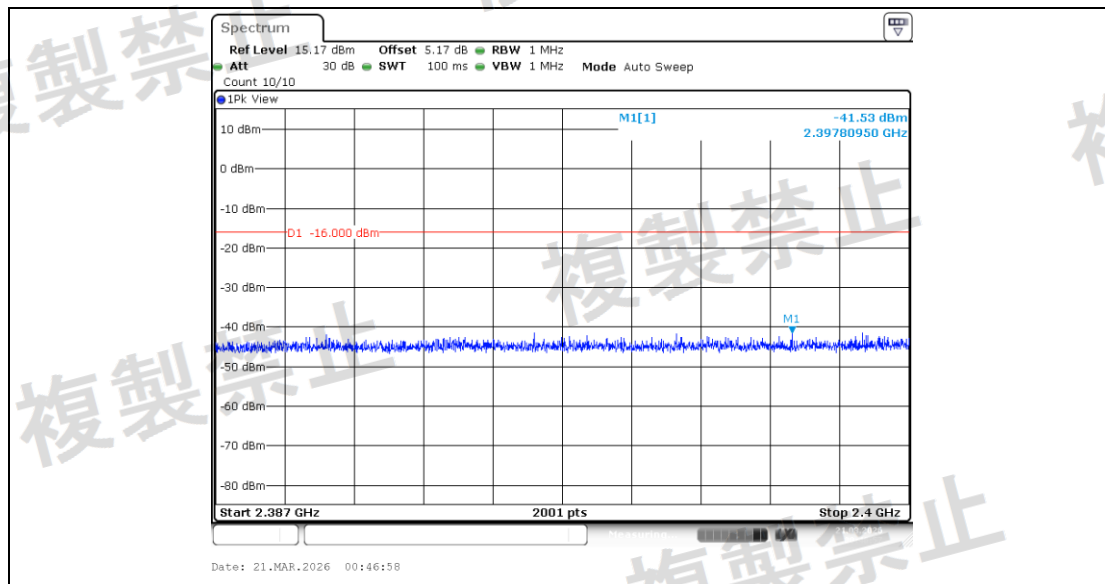
NTNV_11N40SISO_Ant1_2442_2483.5~2496.5



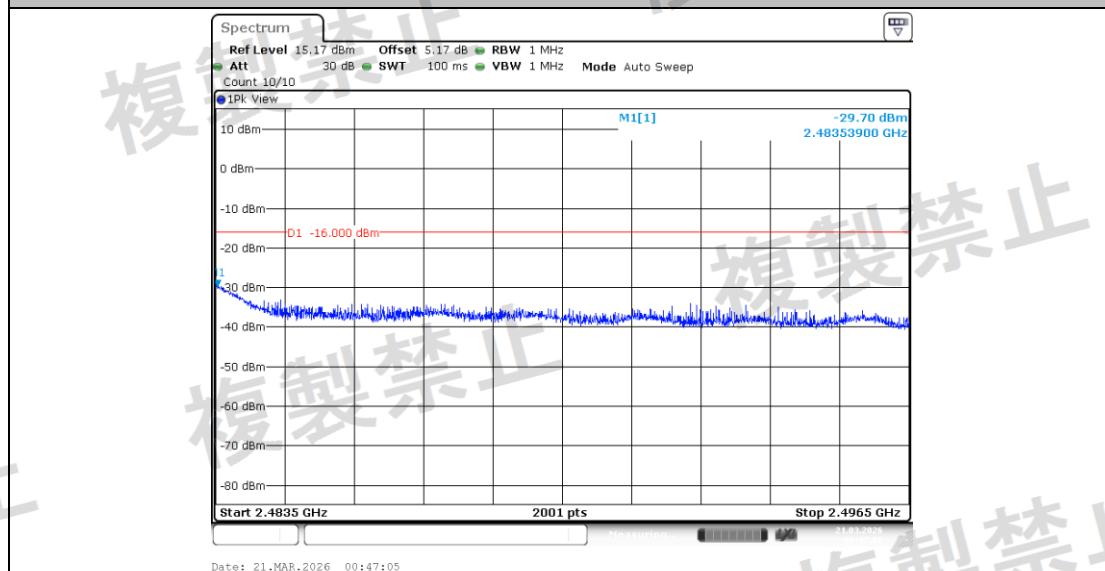
NTNV_11N40SISO_Ant1_2442_2496.5~13000



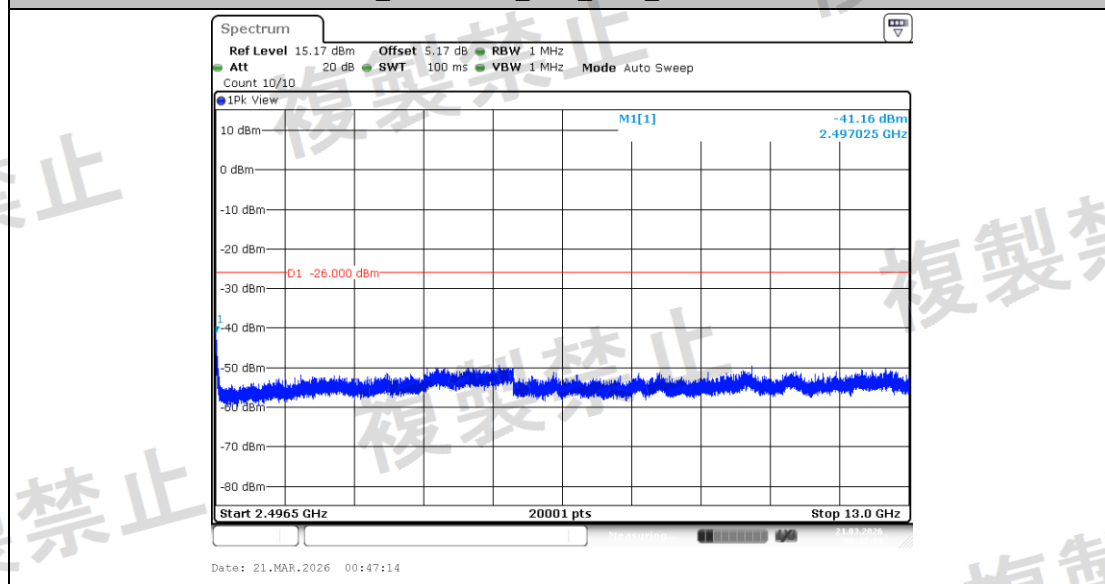




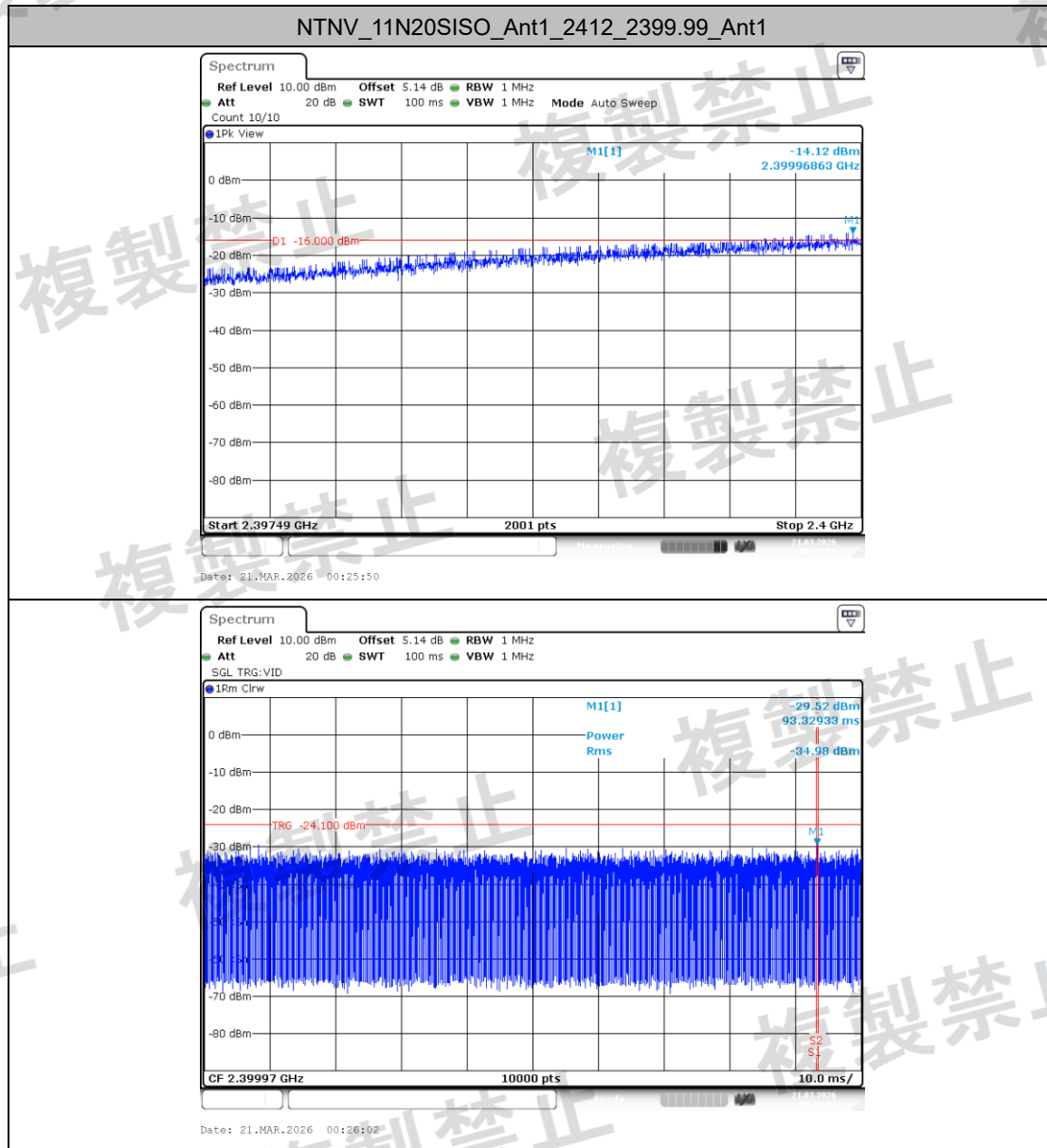
NTNV_11N40SISO_Ant1_2462_2483.5~2496.5



NTNV_11N40SISO_Ant1_2462_2496.5~13000



Test Graphs_Step2

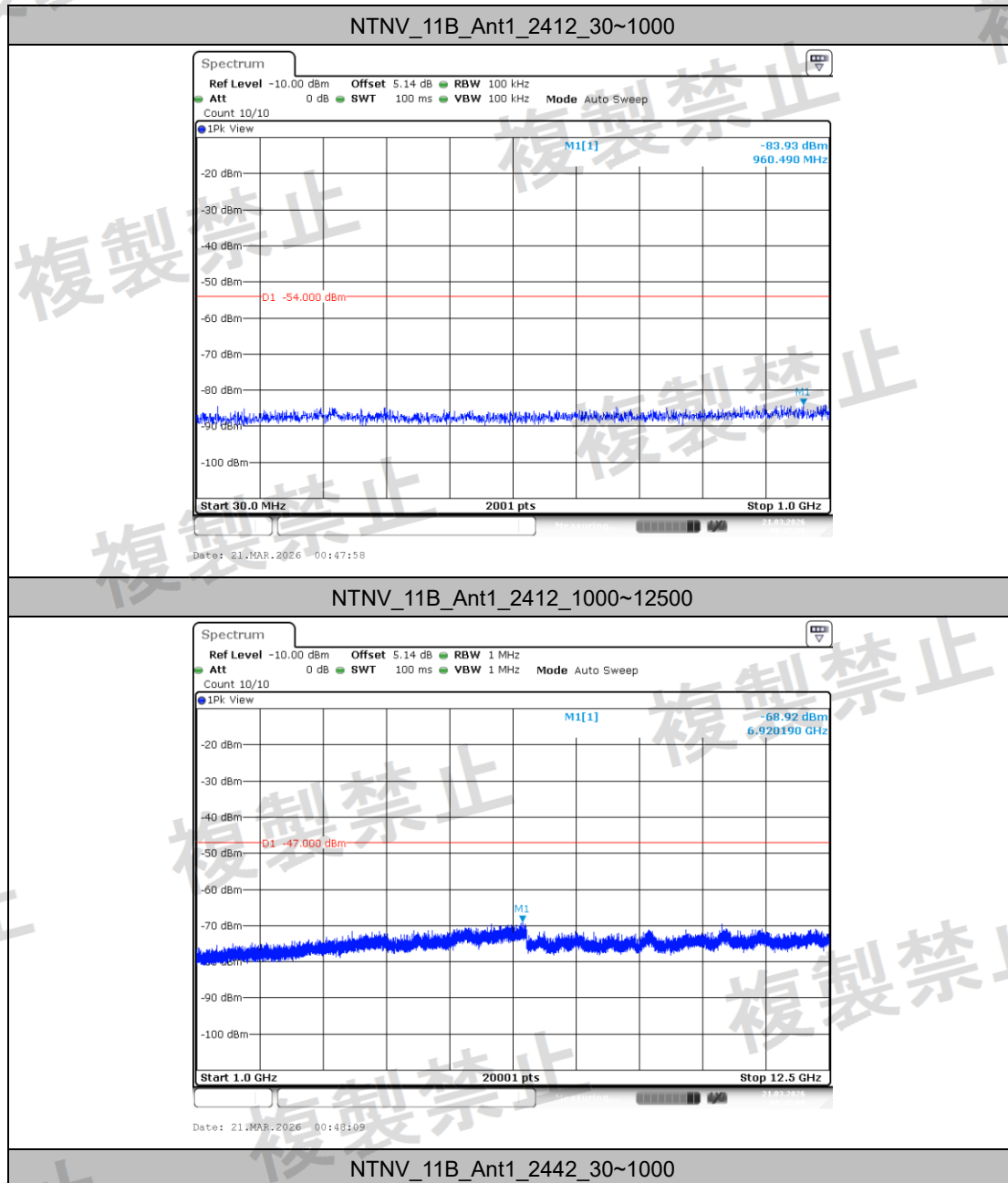


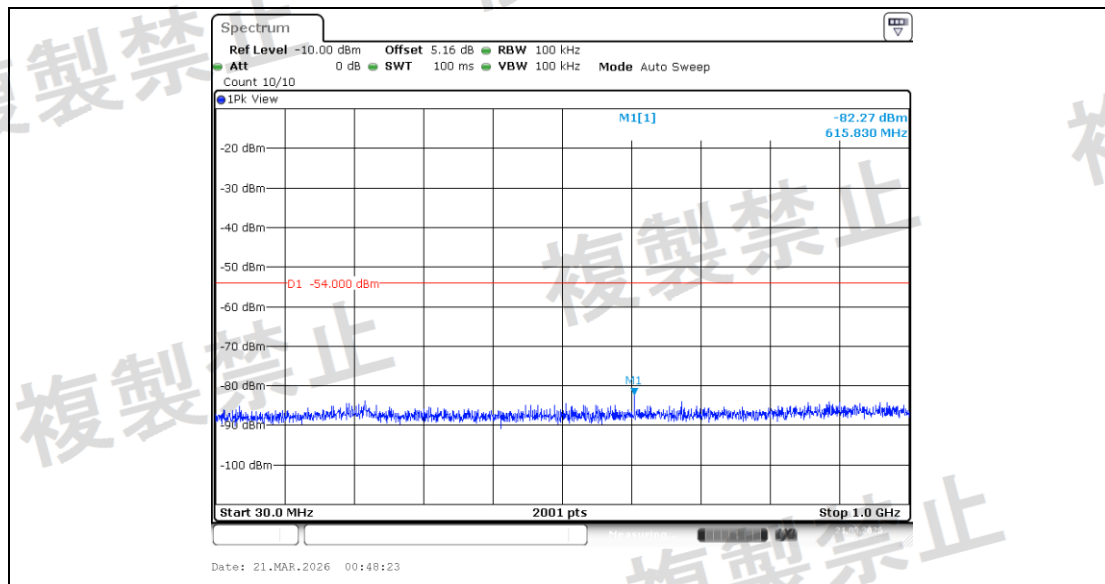
Appendix E: Spurious Emission of RX

Test Result

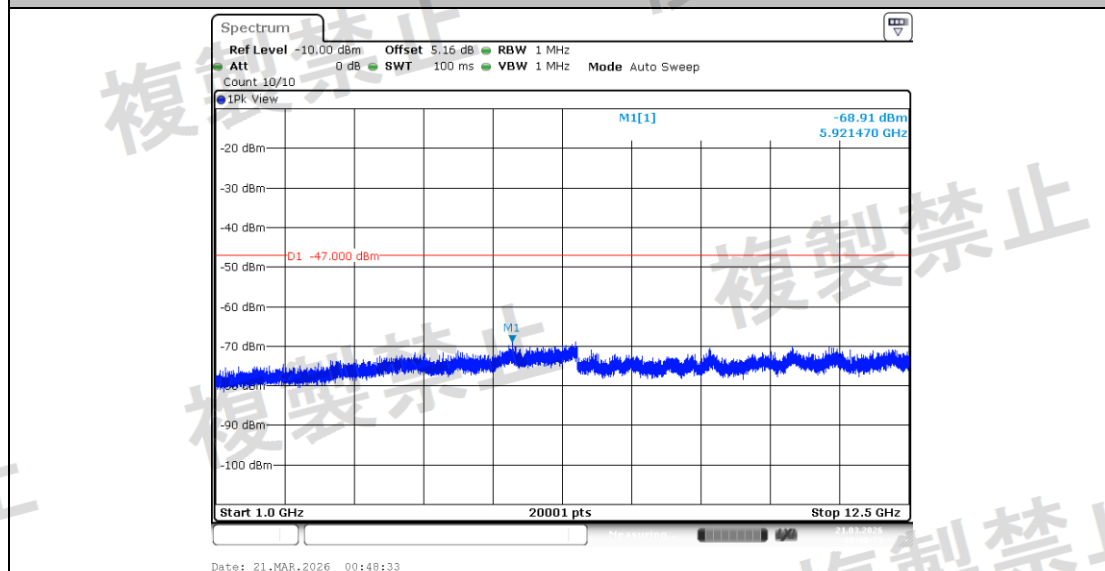
TestCondition	TestMode	Antenna	Channel (MHz)	Freq.Range [MHz]	Freq. [MHz]	Result [dBm]	Limit [dBm]	Result [μW]	Limit [μW]	Verdict
NTNV	11B	Ant1	2412	30~1000	960.49	-83.93	≤-54	0.00405	≤4	PASS
				1000~12500	6920.19	-68.92	≤-47	0.12823	≤20	PASS
			2442	30~1000	615.83	-82.27	≤-54	0.00593	≤4	PASS
				1000~12500	5921.47	-68.91	≤-47	0.12853	≤20	PASS
			2472	30~1000	210.57	-83.80	≤-54	0.00417	≤4	PASS
				1000~12500	6356.72	-69.31	≤-47	0.11722	≤20	PASS
	11G	Ant1	2412	30~1000	247.41	-83.80	≤-54	0.00417	≤4	PASS
				1000~12500	6850.62	-69.27	≤-47	0.11830	≤20	PASS
			2442	30~1000	932.38	-83.61	≤-54	0.00436	≤4	PASS
				1000~12500	6860.39	-69.33	≤-47	0.11668	≤20	PASS
			2472	30~1000	242.08	-82.41	≤-54	0.00574	≤4	PASS
				1000~12500	6908.69	-69.32	≤-47	0.11695	≤20	PASS
	11N20SI SO	Ant1	2412	30~1000	612.92	-83.84	≤-54	0.00413	≤4	PASS
				1000~12500	6638.46	-69.50	≤-47	0.11220	≤20	PASS
			2442	30~1000	975.03	-83.88	≤-54	0.00409	≤4	PASS
				1000~12500	5925.49	-68.74	≤-47	0.13366	≤20	PASS
			2472	30~1000	855.78	-82.93	≤-54	0.00509	≤4	PASS
				1000~12500	6843.72	-69.56	≤-47	0.11066	≤20	PASS
	11N40SI SO	Ant1	2422	30~1000	836.39	-82.69	≤-54	0.00538	≤4	PASS
				1000~12500	12216.25	-69.41	≤-47	0.11455	≤20	PASS
			2442	30~1000	974.55	-83.22	≤-54	0.00476	≤4	PASS
				1000~12500	6829.92	-69.46	≤-47	0.11324	≤20	PASS
			2462	30~1000	881.96	-83.83	≤-54	0.00414	≤4	PASS
				1000~12500	6836.82	-68.89	≤-47	0.12912	≤20	PASS

Test Graphs

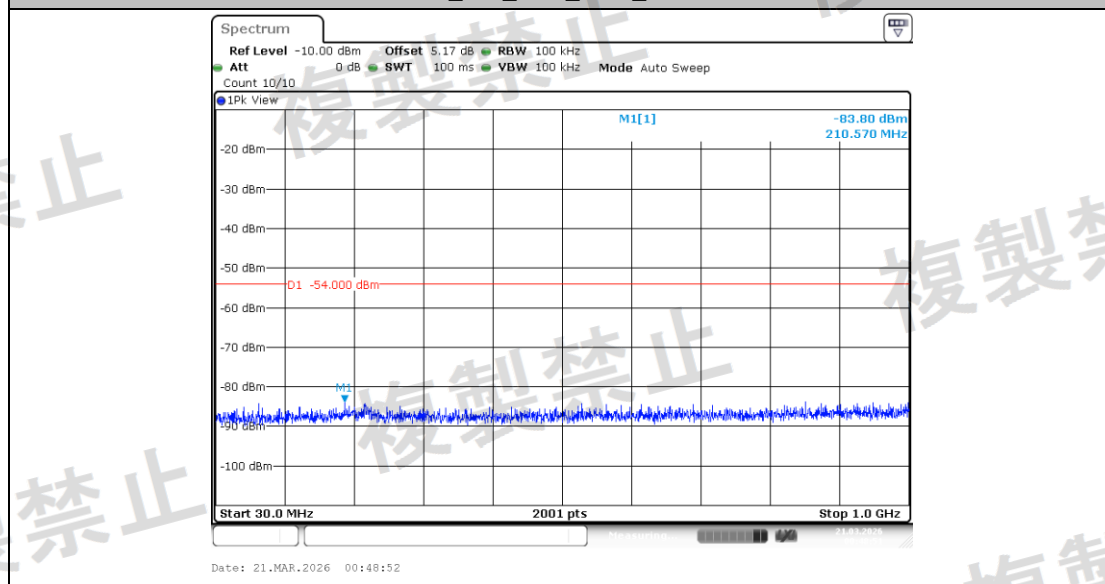


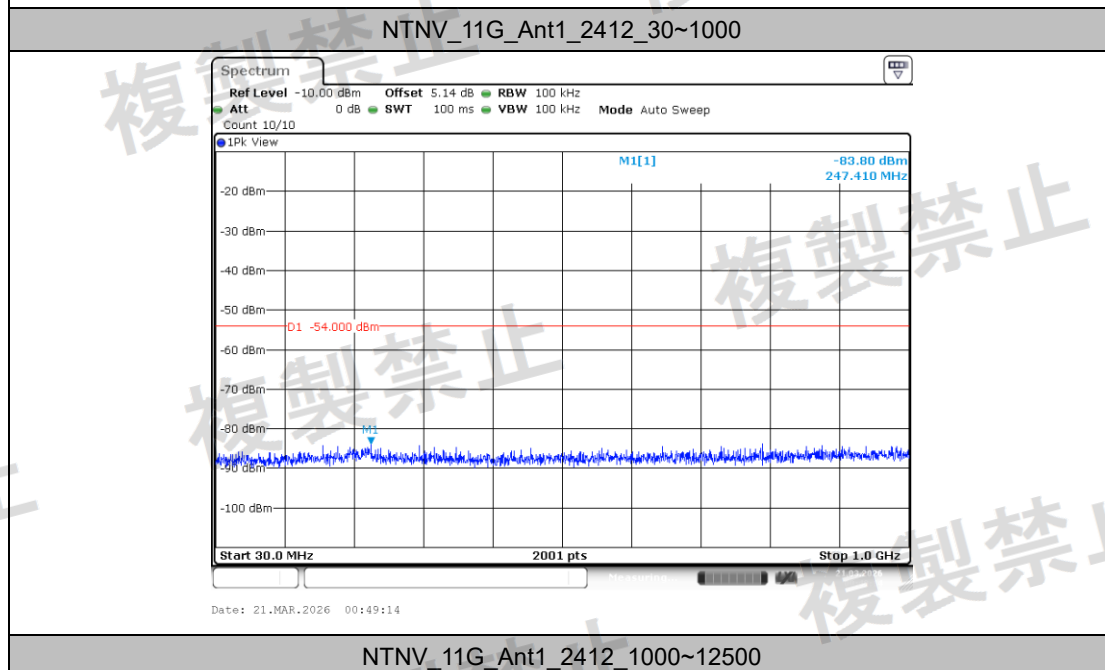
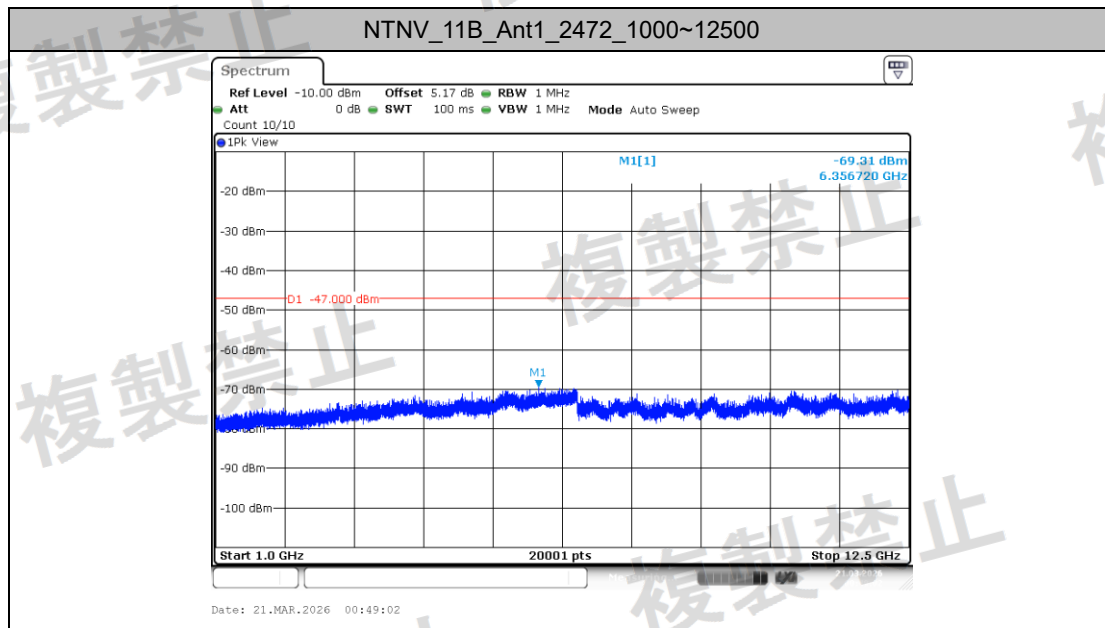


NTNV_11B_Ant1_2442_1000~12500

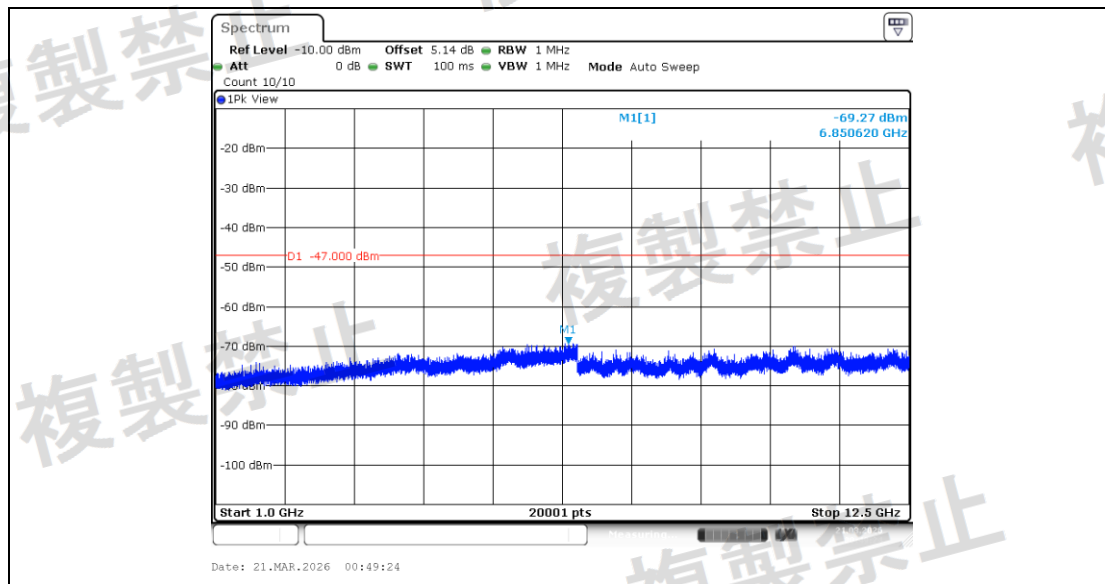


NTNV_11B_Ant1_2472_30~1000

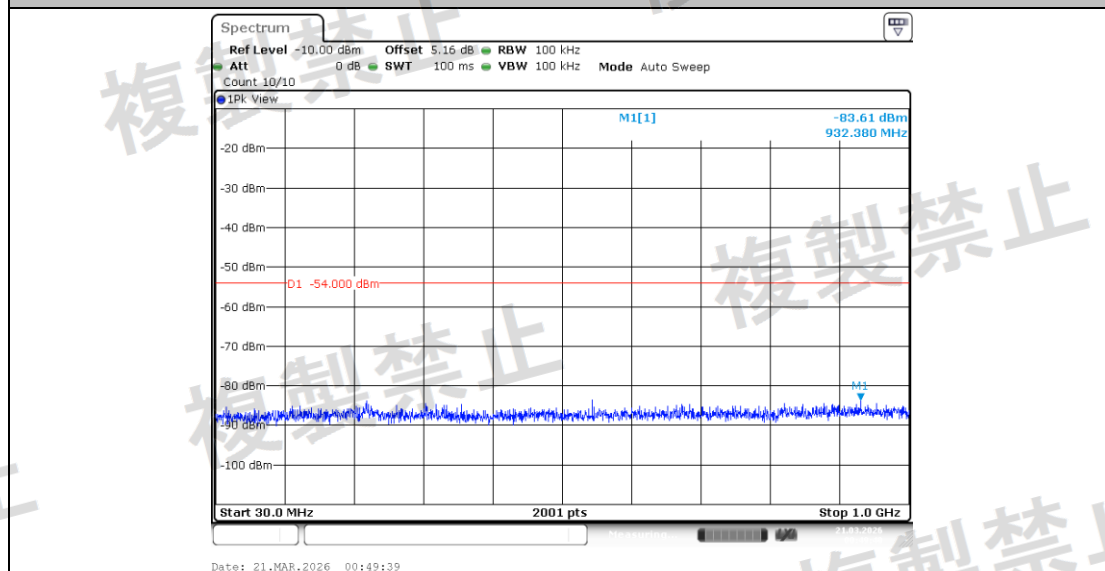




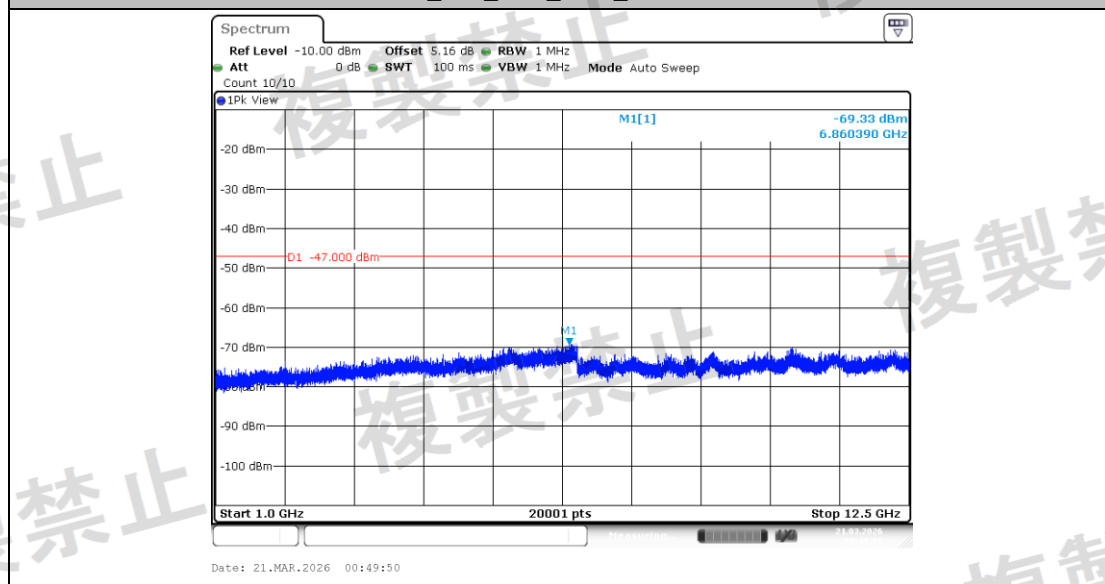
NTNV_11G_Ant1_2412_1000~12500

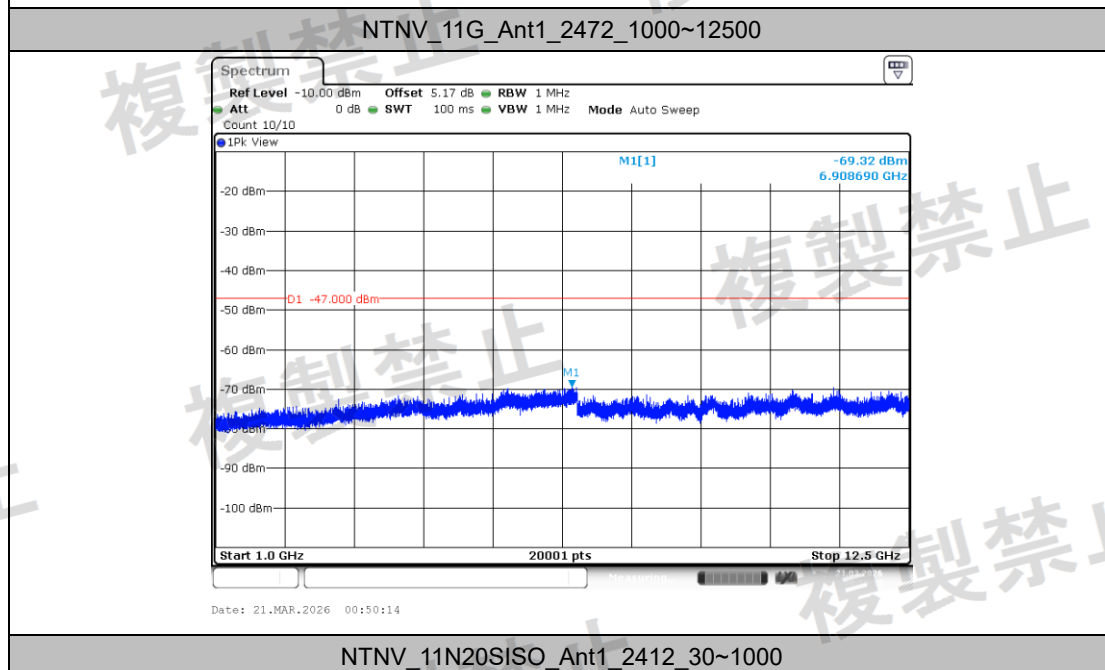
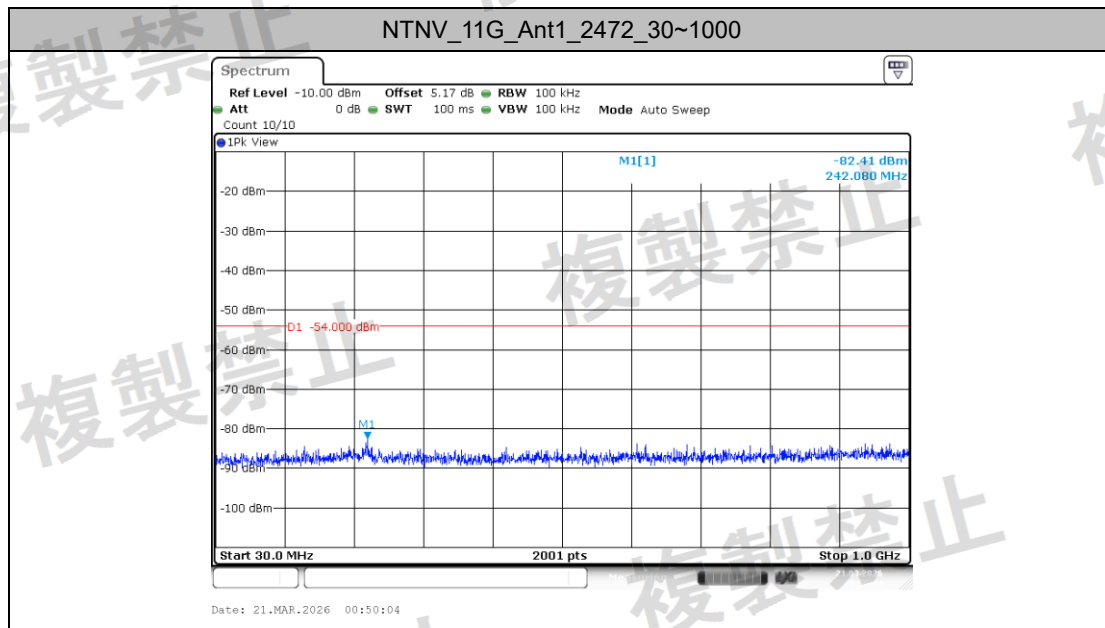


NTNV_11G_Ant1_2442_30~1000

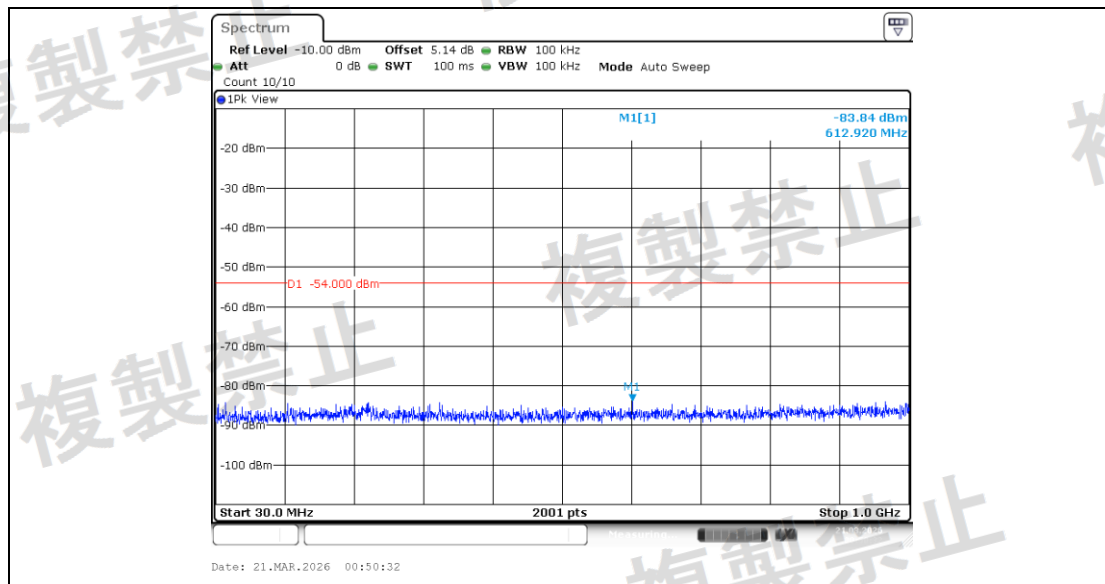


NTNV_11G_Ant1_2442_1000~12500

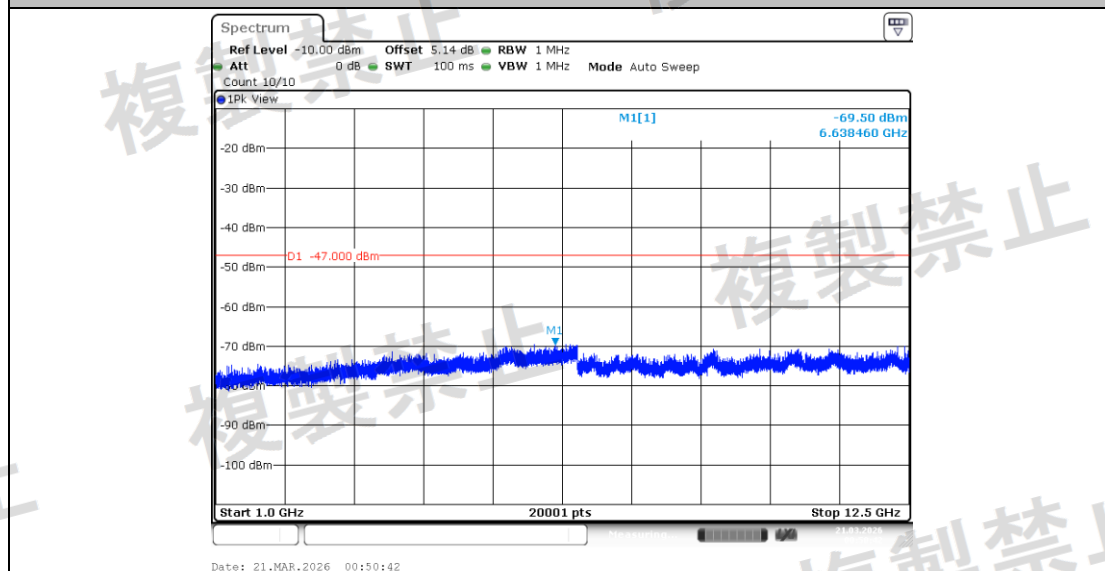




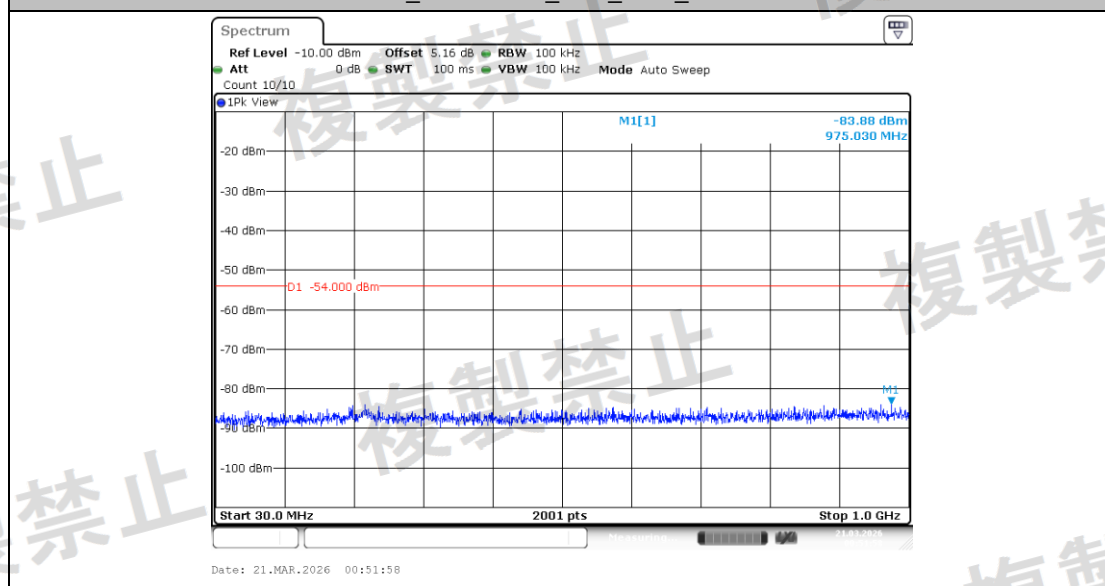
NTNV_11N20SISO_Ant1_2412_30~1000

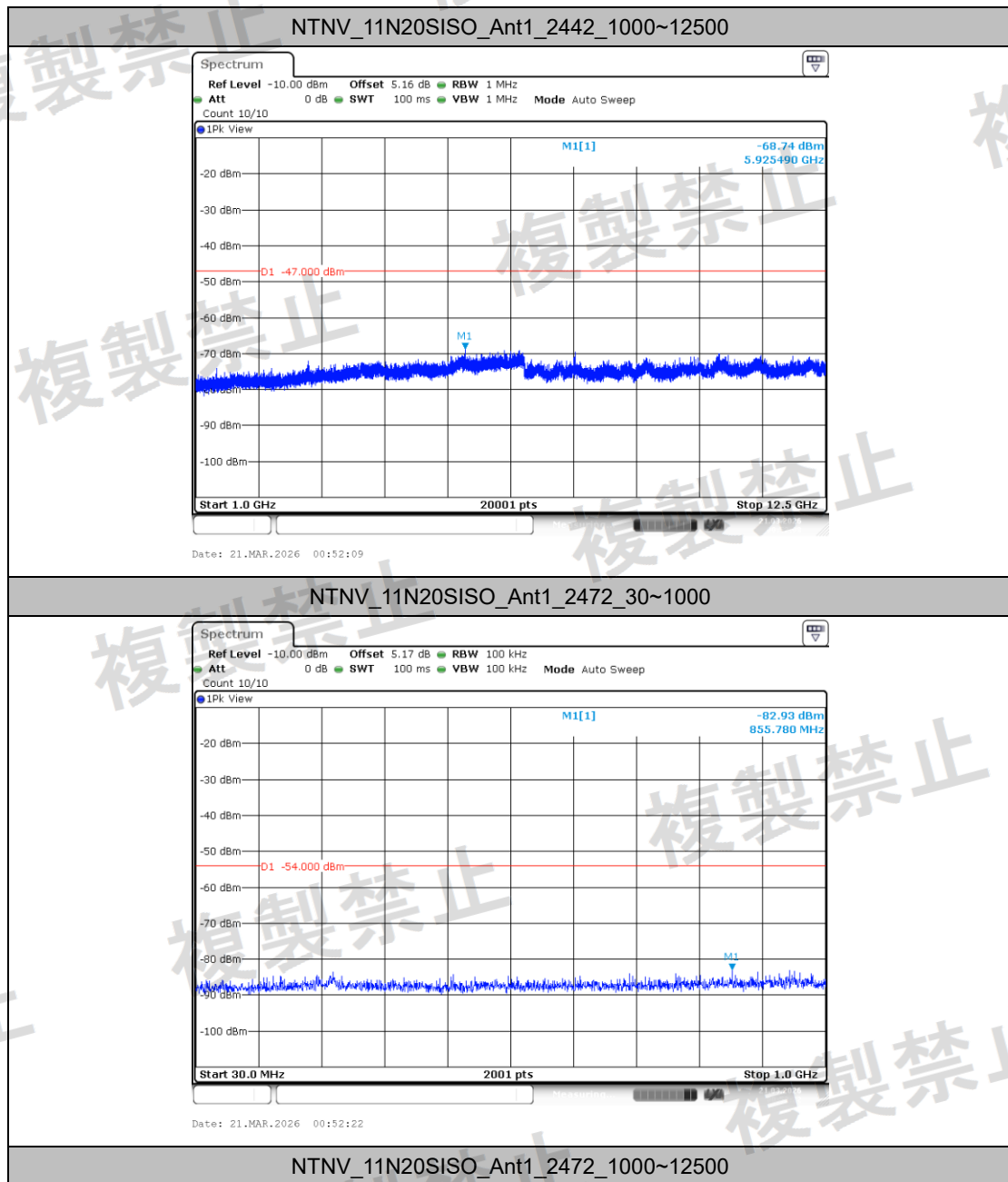


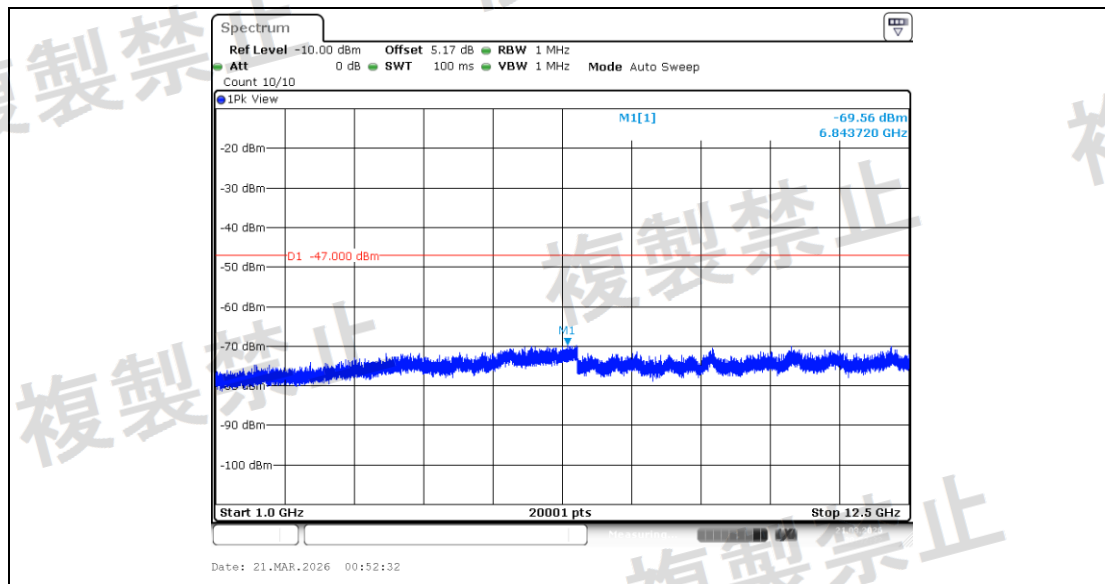
NTNV_11N20SISO_Ant1_2412_1000~12500



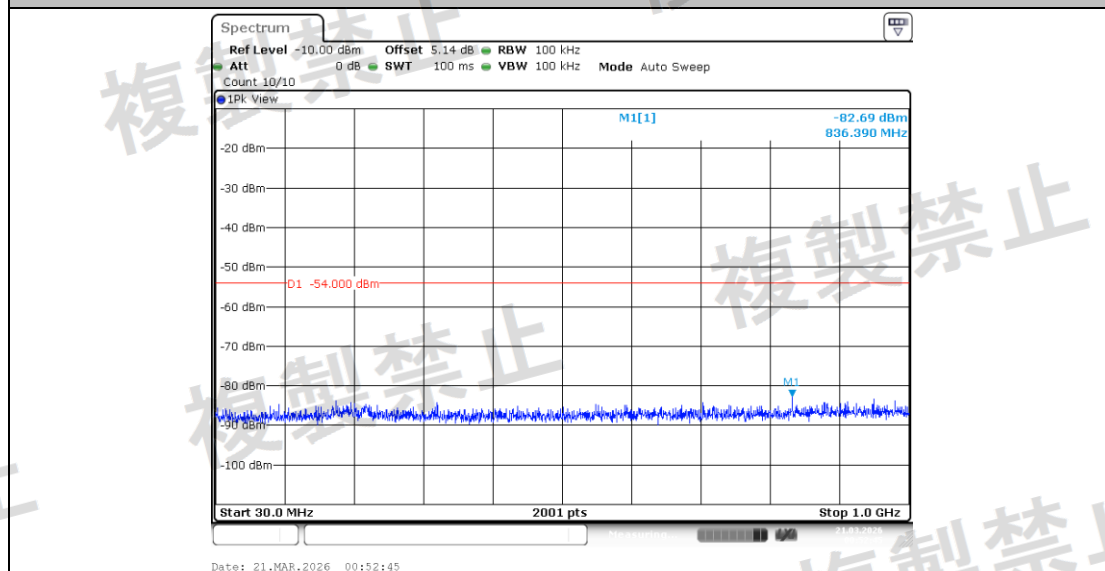
NTNV_11N20SISO_Ant1_2442_30~1000



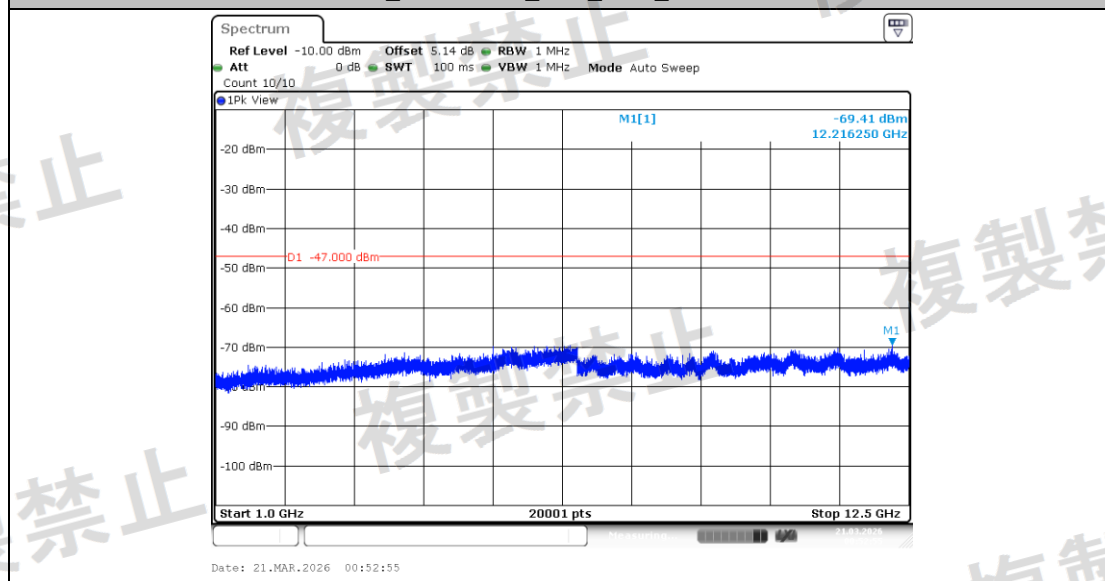


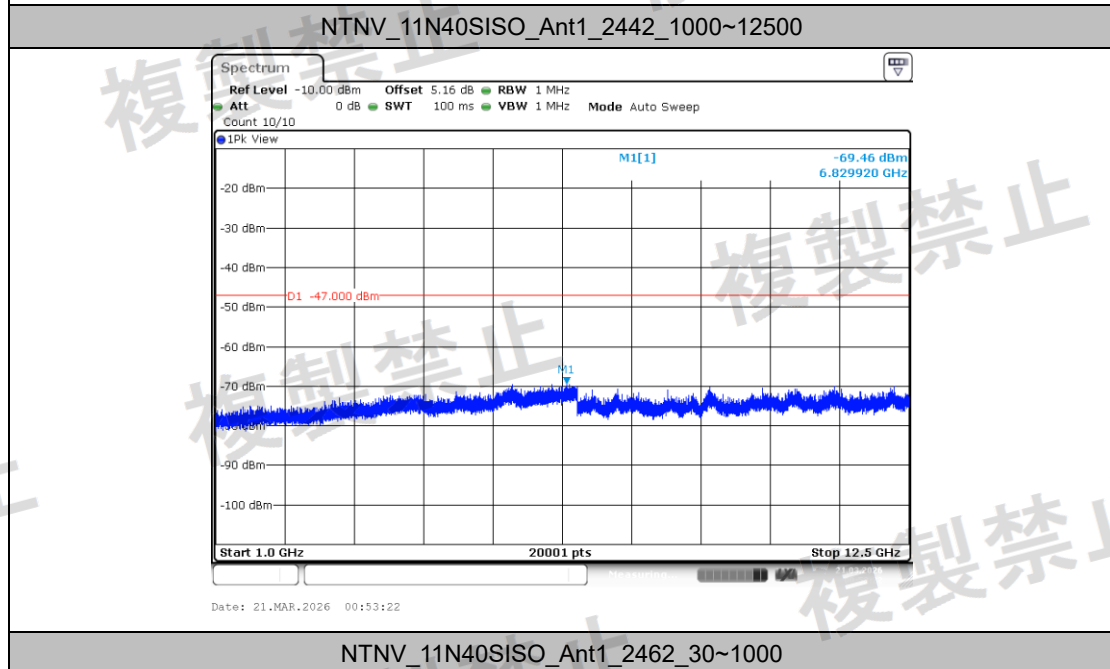
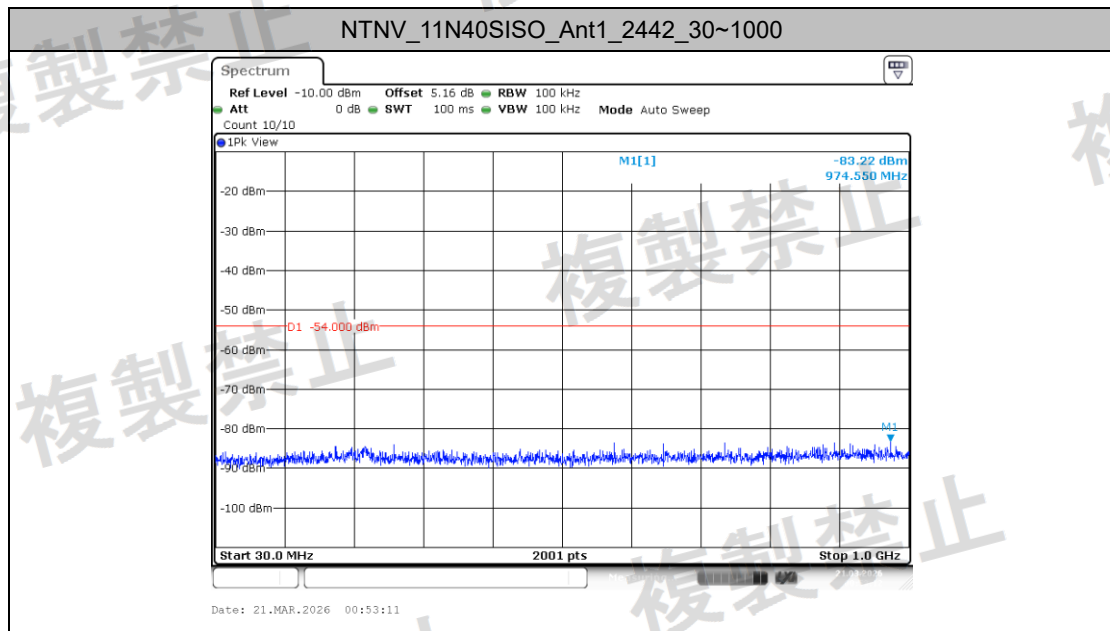


NTNV_11N40SISO_Ant1_2422_30~1000

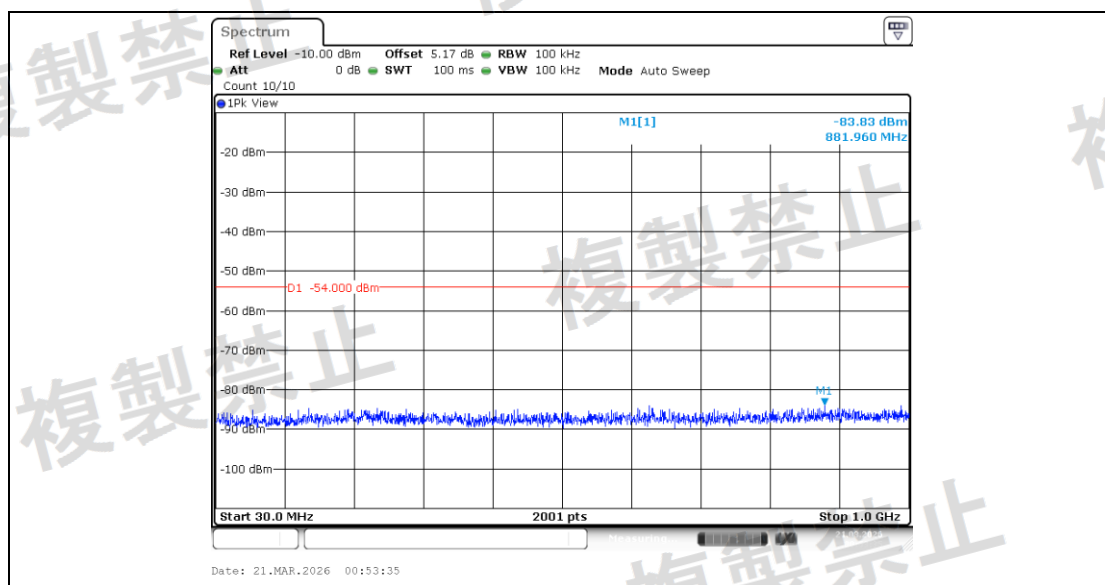


NTNV_11N40SISO_Ant1_2422_1000~12500





NTNV_11N40SISO_Ant1_2462_30~1000



NTNV_11N40SISO_Ant1_2462_1000~12500

